## 1. PURPOSE

California Environmental Quality Act (CEQA) Guidelines Section 15126.6 provides that the purpose of the alternatives section of an EIR is to assess a range of reasonable alternatives to the proposed project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. The EIR must also include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. The discussion of alternatives should be governed by the "rule of reason." Generally, significant effects of an alternative shall be discussed, but in less detail than the proposed project.

## 2. INTRODUCTION

As stated above, the principal purpose of the alternatives analysis is to assess a range of project alternatives that would reduce the magnitude of, or eliminate, potential project-related impacts. However, the *State CEQA Guidelines* place some restrictions on the range of alternatives an EIR must address. First, an EIR need only examine those alternatives that meet most basic objectives of the project. Second, the *State CEQA Guidelines* stipulate that alternatives addressed in an EIR should be feasible and should not be considered remote or speculative. When addressing feasibility, the *State CEQA Guidelines* state that "...among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, jurisdictional boundaries, and whether the applicant can reasonably acquire, control or otherwise have access to the alternative site." Third, where a previous EIR analyzed a range of reasonable alternative locations and environmental impacts for a project with the same basic purpose, the EIR may rely on the previous document to assess the feasibility of potential project alternatives to the extent the circumstances remain substantially the same as they relate to such alternatives.

Based on these CEQA-driven directives, alternatives to the project that would reduce significant adverse impacts without undermining basic project objectives were selected for analysis in this section.

# 3. NEWHALL RANCH SPECIFIC PLAN ALTERNATIVES PREVIOUSLY EVALUATED

The certified Newhall Ranch Specific Plan Program EIR evaluated six on-site alternatives to the Specific Plan, and three alternative site locations. These nine alternatives were selected based on the significant impacts of the Specific Plan, the comments received in response to the Notice of Preparation, discussions with Los Angeles County (County) staff and its Significant Ecological Area Technical Advisory

Committee, discussions at 26 Community Task Force meetings, and discussions with members of the community and community groups. The previously evaluated on-site and off-site alternatives are identified below.

## a. On-Site Alternatives

- Alternative 1, The No Project Alternative. This alternative is required by the State CEQA Guidelines,
  and it compared the impacts that might occur if the site was left in its present condition with those
  that would be generated by development of the Specific Plan. While many impacts associated with
  development of the Specific Plan would be avoided under this alternative, certain other impacts
  would not necessarily be precluded under this alternative;
- Alternative 2, Site Buildout under the Santa Clarita Valley Area Plan. The purpose of this alternative was to describe the impacts of developing the site as allowed by the Santa Clarita Valley Area Plan and to compare such impacts with those generated by development of the Specific Plan. Under this alternative, approximately 2,070 dwelling units and 47,372 square feet of commercial space would be constructed on the Specific Plan site. Given the substantial reduction in site population under this alternative, direct and indirect impacts generally would be less than those under the Specific Plan. However, certain Specific Plan project benefits, including increased public access to dedicated open space, would not be realized under this alternative;
- Alternative 3, The Clustered Alternative (Same Amount of Development as Specific Plan, Smaller Footprint). The primary purpose of this alternative was to minimize or avoid potentially significant biological impacts by reducing the development footprint of the Specific Plan. In doing so, many other impacts that could occur as a result of land surface disturbance (e.g., impacts to cultural resources, geotechnical resources, fugitive dust impacts generated by grading, etc.) might also be reduced in magnitude by a reduction in the development footprint of the Specific Plan;
- Alternative 4, The 19,750-Unit Alternative (20 Percent Reduction in Development, Same Footprint). The primary purpose of this alternative was to minimize or avoid potentially significant traffic, air quality, noise, indirect biological, utility (e.g., water demand, wastewater generation), and public service (e.g., fire department, sheriff department) impacts by generally reducing the overall amount of development on the site;
- Alternative 5, The 15,000-Unit Alternative (39 Percent Reduction in Development, Smaller Footprint). The primary purpose of this alternative was to avoid or minimize the potentially significant direct and indirect biological impacts created by the Specific Plan by removing commercial and residential development completely from the previous Significant Ecological Area (SEA) 23 boundary and by reducing the intensity of development and footprint upon which such development would occur. In doing so, many other impacts which could occur as a result of site development might also be reduced in magnitude; and
- Alternative 6, The 8,000-Unit Alternative (68 Percent Reduction in Development, Smaller Footprint). The primary purpose of this alternative was to avoid or minimize the potentially significant visual and biological impacts created by the Specific Plan. In doing so, many other impacts that could occur as a result of site development might also be reduced in magnitude.

The Specific Plan Program EIR alternatives analysis concluded that the 8,000-unit alternative was the environmentally superior alternative. However, the Board of Supervisors did not choose this alternative, and instead adopted the Newhall Ranch Specific Plan, as revised, along with the mitigation measures identified in both the Final EIR and Mitigation Monitoring Plan. The Board also found that the No Project Alternative was not feasible or acceptable because, if implemented, many of the basic objectives of the Specific Plan would not be attained. As to the other alternatives, the Board found, generally, that the alternatives were infeasible because they too narrowly limited the range of housing opportunities and did not reflect the market conditions under which the Specific Plan would be developed, and also would not achieve many of the basic objectives of the Specific Plan. Consequently, in accordance with *State CEQA Guidelines* Section 15093, a Statement of Overriding Considerations was adopted to substantiate the Board's decision to reject the environmentally superior alternative, and the other identified alternatives, because the significant benefits afforded by the Specific Plan outweighed the environmental effects identified in the Newhall Ranch Specific Plan Program EIR.

## b. Off-Site Alternatives

Twenty-three sites were initially considered as part of the alternative site evaluation conducted in the certified Newhall Ranch Specific Plan Program EIR. Of the 23 sites considered, three were found to be reasonably comparable to the Newhall Ranch Specific Plan site in terms of size, topography, and location in relation to the Los Angeles planning and market area. The three sites are the Hathaway Ranch, the Temescal Ranch, and The Newhall Land and Farming Company's Ventura County holdings. The Newhall Ranch Specific Plan Program EIR fully evaluated the environmental impacts of developing these alternative sites compared to developing the Newhall Ranch Specific Plan site.

The Board of Supervisors found that none of the off-site alternatives were superior from an environmental standpoint when compared to the Newhall Ranch Specific Plan site. The Board found, generally, that each of the off-site alternatives would create greater impacts than those that would result with development on the proposed Specific Plan site, that many of the objectives of the project would not be achieved with the off-site alternatives, and that several of the benefits associated with the project would not be realized with the off-site alternatives. Therefore, the Board rejected all of the off-site alternatives as neither reasonable nor feasible. No changes in the Specific Plan or its circumstances have occurred since the Newhall Ranch Specific Plan Program EIR was certified in May 2003. In light of this fact, and given that the proposed Landmark Village project is consistent with the land uses in the Specific Plan, it can be concluded that the prior Newhall Ranch Specific Plan Program EIR still adequately addresses alternative site locations. Consistent with *State CEQA Guidelines* Section 15126.6(f)(2)(c), as well as Sections 15152, 15168, and 15385, because the Specific Plan Program EIR sufficiently analyzed a range of reasonable alternative locations and associated environmental impacts for the Specific Plan, and

because the circumstances remain substantially the same as they relate to off-site alternative locations, this EIR relies on the off-site alternatives previously evaluated in the Newhall Ranch Specific Plan Program EIR to assess the feasibility of potential project alternatives. Accordingly, this analysis incorporates by reference the discussions and analysis contained in that certified EIR pertaining to the off-site alternatives.

#### 4. LANDMARK VILLAGE ALTERNATIVES

This EIR, at Section 4.0, Environmental Impact Analysis, determined that project implementation would result in six significant unavoidable impacts relative to biota, visual qualities, construction noise, air quality, solid waste services, and agricultural resources, and in several other potentially significant impacts prior to mitigation.

Based on considerations of avoiding or substantially lessening the significant impacts identified under the proposed project, as well as consideration of the basic objectives of the project, public comments received in response to the Notice of Preparation (NOP), discussions with County staff, the public, and other public agencies, the following four alternatives to the proposed project were selected for analysis: (1) No Project/No Development Alternative; (2) No Project/Future Development Alternative; (3) Floodplain Avoidance Alternative; and (4) Cluster Alternative. Each of these alternatives is discussed separately below. No other alternatives were identified or rejected as infeasible, during the County's EIR scoping process.

## a. Alternative 1: No Project/No Development Alternative

Section 15126.6(e) of the *State CEQA Guidelines* provides guidance on consideration of the No Project condition. When examining a development project on a specific piece of property, the No Project Alternative is the circumstance under which the project does not proceed. Under a No Project/No Development scenario, the discussion compares the environmental effects of the property remaining in its current state against the environmental effects that would occur if the project were approved.

Under the No Project/No Development Alternative, the project site would remain in its present condition and would be used for limited agricultural purposes. As described in **Section 2.0**, **Environmental and Regulatory Setting**, a portion of the site is, or has been, used for agricultural activities, water wells, and utility easements and, therefore, is either in an otherwise disturbed state (roadway rights-of-way), or is presently open space. Under the No Project/No Development Alternative, the potential project-related impacts associated with development of the project site and described in **Section 4.0**, **Environmental Impact Analysis**, would not occur.

However, the No Project/No Development Alternative would not result in bank stabilization along the tract map site and portions of the utility corridor and erosion protection (turf-reinforcement mats [TRMs] or similar) along other portions of the utility corridor, thereby allowing continued sedimentation/erosion to occur at these locations. Also, in its current state there is no flood protection on the tract map site, except in limited areas, such as adjacent to the Castaic Creek Bridge. Consequently, 10- through 100-year storm events experienced under the no project condition would result in flooding on portions of the tract map site. In contrast, the proposed project would elevate the tract map site out of the floodplain and construct bank protection at various locations, thereby removing the flood hazard that presently exists.

Because of ongoing agricultural cultivation, the presence of the State Route 126 (SR-126) and existing utility infrastructure, the tract map site, Adobe Canyon borrow site, Chiquito Canyon grading site with debris basins, utility corridor, water tank site, Long Canyon Road Bridge, drainage improvements, and related haul routes presently have little habitat value. The area of greatest biological value is found within the River Corridor Special Management Area (SMA), which would not be disturbed under the No Project/No Development Alternative. In relation to the proposed project, this alternative would have less demand on public services and utilities (i.e., water service, wastewater, solid waste, education, libraries, parks and recreation, fire and police protection, gas and electricity) and floodplain modifications and, correspondingly, no significant impacts. Project viewsheds would remain the same as the existing condition. The alternative would not generate the traffic, air emissions, and noise emissions associated with the proposed project. Therefore, in contrast to the proposed project, this alternative would not result in significant unavoidable impacts related to biota, visual qualities, construction noise, air quality, solid waste services, and agricultural resources.

However, because the proposed project would not be constructed under the No Project/No Development Alternative, none of the project objectives set forth in this EIR, at **Section 1.0**, **Project Description**, would be attained under this alternative.

## b. Alternative 2: No Project/Future Development

Under *State CEQA Guidelines* Section 15126.6(e)(3)(B), if disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, then this "no project" consequence (i.e., No Project/Future Development scenario) should be discussed.

Disapproval of the proposed Landmark Village project would not necessarily preclude future development of the property. The County Board of Supervisors adopted the Newhall Ranch Specific Plan on May 27, 2003, consistent with Title 22, Chapter 22.46 of the Los Angeles County Zoning Code. The Newhall Ranch Specific Plan implements the goals and policies of the General Plan and Santa Clarita

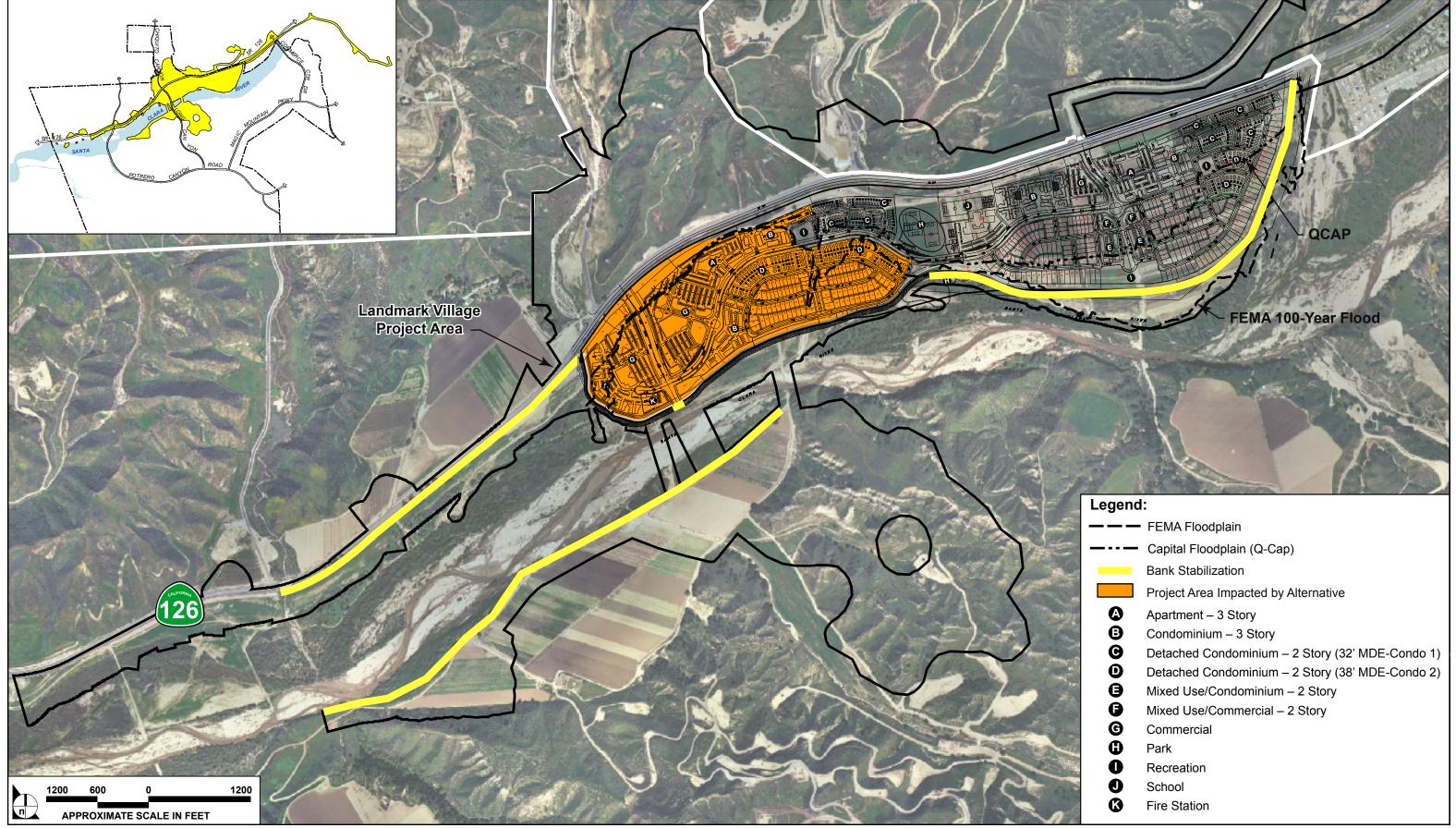
Valley Area Plan on a focused, site-specific basis. The Specific Plan permits a maximum of 1,444 dwelling units and approximately 1.5 million square feet of commercial land uses within the planning areas that constitute the Landmark Village tract map site.

In addition to being planned for developed use, the project site is located near existing water, sewer, natural gas, telephone, and cable lines that are present within existing roadway rights-of-way. Further, the site is located within the existing service area of both sheriffs and fire department stations and all public services are readily available to serve future site development. Given that the property currently is planned for residential and commercial land uses that can be served by the existing infrastructure, it is reasonable to assume that the site will likely be developed at some time in the future if the currently proposed project is not approved. The environmental impacts associated with such a development alternative likely would be comparable to those identified for the proposed project, which is fully evaluated throughout **Section 4.0, Environmental Impact Analysis**, and the following sections, of this EIR. Therefore, the No Project/Future Development Alternative likely would not avoid or substantially lessen any of the proposed project's identified significant effects.

Whether or not the No Project/Future Development Alternative would attain any of the project objectives is dependent upon the specific type of development that ultimately would occur under this alternative. Therefore, any conclusion in this respect, by necessity, would be speculative.

## c. Alternative 3 – Floodplain Avoidance Alternative

As shown on Figure 5.0-1, Floodplain Avoidance Alternative, the Floodplain Avoidance Alternative retains the overall layout of the proposed Landmark Village project, except this alternative would not place development within areas of the tract map site presently at a lower elevation than the 100-year Federal Emergency Management Agency (FEMA) elevation and, therefore, under this alternative it would not be necessary to elevate portions of the Landmark Village site out of the floodplain area. Bank stabilization would continue to be required along the perimeter of the reduced development footprint fronting the river, the base of the Long Canyon Road Bridge, and the south side of the utility corridor extending to the Newhall Ranch Water Reclamation Plant site.



SOURCE: Impact Sciences, Inc. - September 2006

FIGURE 5.0-1

This alternative would reduce development by 286 dwelling units along with a reduction of 828,000 square feet of commercial space when compared to the proposed project, for a total of 1,158 dwelling units and 205,000 commercial square feet. The Floodplain Avoidance Alternative would retain the 9-acre elementary school, 16-acre community park, and three of the four private recreation areas proposed as part of the Landmark Village project. Additionally, under this alternative, approximately 79 acres of land would remain available for agricultural production due to the reduction in residential and commercial development.

## d. Potential Impacts

The following discussion compares the potential environmental impacts of this alternative to those associated with implementation of the proposed project.

### (1) Geotechnical and Soil Resources

Implementation of this alternative would result in less grading because of the reduced development footprint on the tract map site. This alternative permits development of a portion of the property along with a reduction in the amount of soil imported to the site from the Adobe Canyon borrow site. However, all improvements constructed on the site would be subjected to the forces of ground movement during seismic events similar to the proposed project and would also be subject to the same construction requirements as the proposed project. Because there would be less development under this alternative than under the proposed project, geotechnical hazards would be reduced and, therefore, Alternative 3 would result in fewer impacts than the proposed project with respect to geology and soils.

## (2) Hydrology

Implementation of this alternative would result in slightly less storm runoff and more infiltration than the proposed project because less area would be developed resulting in more open area. Also, it is likely the landscape irrigation needs of Alternative 3 would be less than the proposed project due to less landscaped acreage. The urban runoff that is generated under this alternative would be conveyed and discharged into the Santa Clara River in a similar manner as the proposed project. This alternative would also reduce the amount of bank stabilization needed on site, because the development footprint fronting the river would be reduced. Consequently, this alternative would result in fewer impacts from a hydrology perspective than the proposed project.

## (3) Water Quality

Under either this alternative or the proposed project, Project Design Features (PDFs) incorporated into the development to address water quality and hydrologic impacts would include site design, source control, treatment control, and hydromodification control Best Management Practices (BMPs). In addition, flow control BMPs would be incorporated into the PDFs in order to comply with the Los Angeles Countywide Standard Urban Storm Water Mitigation Plan (SUSMP) and County Interim Peak Flow Standard. The flow control BMPs for either development of the proposed project or Alternative 3 would include both source control and detention. The PDFs combined with the implementation of recommended mitigation measures would reduce water quality and hydromodification impacts to less than significant levels under either development scenario. However, this alternative may result in increased erosion due to the upland relocation of bank stabilization to accommodate the reduced development footprint and the corresponding potential for flood flows to erode this now unprotected area. For this reason, Alternative 3 would result in greater impacts than the proposed project from a water quality perspective.

#### (4) Biota

Under Alternative 3, development would not occur within the FEMA 100-year floodplain, there would be less land disturbance at the Adobe Canyon borrow site, less impact to resources subject to California Department of Fish and Game (CDFG) and U.S. Army Corps of Engineers (ACOE) jurisdiction, and a reduction in land disturbance on the tract map site. Consequently, Alternative 3 would reduce the direct biological impacts compared to the proposed project. Furthermore, significant indirect impacts such as increased light and glare, increased non-native plant species and increased human and domestic animal presence would also be reduced as Alternative 3 represents reduced development intensity and provides greater separation between resources in the River Corridor SMA and on-site development. For these reasons, Alternative 3 would result in fewer impacts to biota than the proposed project.

## (5) Floodplain Modifications

Alternative 3 would reduce the extent of floodplain modifications compared to the proposed project by removing the need to elevate portions of the site out of the floodplain. Consequently, floodplain modifications associated with construction and operation of Alternative 3 would result in fewer impacts on sensitive aquatic/riparian resources in the Santa Clara River corridor as this alternative would create slightly less increase in flows, water velocities, water depth, changes in sediment transport and changes in flooded areas. Although the Landmark Village project creates only minor hydraulic effects, which are insufficient to alter the amount, location, and nature of aquatic and riparian habitats in the project area and downstream, as well as insufficient to impact sensitive riparian species, including the unarmored

threespine stickleback, arroyo toad, California red-legged frog, southwestern pond turtle and two-striped garter snake, Alternative 3 would result in fewer impacts than the proposed project relative to floodplain modifications because it would create fewer hydraulic impacts with the elimination of the need to elevate portions of the site from the floodplain.

## (6) Visual Qualities

Development of the site under Alternative 3 or the proposed project would be subject to Development Regulations and Design Guidelines contained in the Specific Plan. These regulations and guidelines address grading, lighting, fencing, landscaping, signage, architecture, and site planning for subsequent subdivisions within the Newhall Ranch Specific Plan. Despite such features, significant visual impacts would result from the change in the visual character of the site from rural to urban. As with the proposed Landmark Village project, Alternative 3 would significantly alter the visual characteristics of the Santa Clara River/SR-126 corridor, as existing open-space views would be replaced with the images of residential development, roadways, bridges, and other human activity. However, significant impacts to views in Chiquito Canyon would be reduced under Alternative 3, as no development would occur on the western most portion of the site. While neither Alternative 3 nor the Landmark Village project is replacing prominent visual features, such as river vegetation or river bluffs, Alternative 3 would reduce disturbance at the Adobe Canyon borrow site compared to the proposed Landmark Village project.

Development under either the proposed project or Alternative 3 would introduce sources of outdoor illumination that do not presently exist. Outdoor lighting, such as streetlights and traffic signals, are essential safety features in development projects that involve new streets and intersections, and cannot be eliminated if the site is to be developed. In conclusion, Alternative 3 would result in fewer impacts than the proposed project relative to visual qualities because it would avoid the significant visual impact from Chiquito Canyon and would not require grading at the Adobe Canyon borrow site.

### (7) Traffic and Access

Implementation of Alternative 3 would reduce the number of vehicle trips generated by on-site uses when compared to the proposed project. Specifically, using the Institute of Transportation Engineers (ITE) *Trip Generation Manual* factors, average daily trip generation for the proposed project is estimated at 41,900 trips. In comparison, Alternative 3 would generate 28,498 trips, resulting in a reduction of 13,402 trips when compared to the proposed project. While there would be less traffic generated with this alternative, the Landmark Village project represents a balanced land plan that contains neighborhood-serving commercial uses that are connected to the residential areas by paseos and trails, thereby promoting alternative means of travel and keeping vehicle trips internal to the project. A reduction of 828,000 square feet of commercial uses as called for under Alternative 3 would likely cause some portion of these internal trips to leave the site as people seek needed goods or services at another

location. Consequently, the reduction in motor vehicle trips generated by on-site uses under Alternative 3 may not result in a proportional reduction in the number of project generated vehicle trips traveling along off-site roadway segments. Nevertheless, Alternative 3 would result in fewer impacts than the proposed project with respect to traffic, as the total number of trips would be reduced when compared to the proposed project.

## (8) Noise

Under either Alternative 3 or the proposed project, development of the property would involve clearing and grading of the ground surface, installation of utility infrastructure, and the building of the proposed improvements. These activities typically involve the temporary use of heavy equipment, smaller equipment, and motor vehicles, which generate both steady static and episodic noise. This noise would primarily affect the occupants of on-site uses constructed in the earlier phases of the development (assuming that the site is occupied in sections as other portions are still under construction) and would be audible to occupants of Travel Village Recreational Vehicle (RV) Park when construction activities would occur on the eastern portion of the site. Individuals who would have an uninterrupted line-of-sight to the construction noise sources could be exposed to noise levels which would exceed the County's Noise Ordinance standards during construction regardless of the development alternative selected. However, because Alternative 3 does reduce the importation of fill, there would be less grading activity and fewer heavy truck trips when compared to the proposed project. For this reason, Alternative 3 would result in fewer impacts than the proposed project with regard to construction noise.

With respect to operational impacts, under either Alternative 3 or the proposed project, building occupants would be subject to traffic noise along SR-126 and on internal roadways, as well as noise from day-to-day activities at the site. Traffic along SR-126 would result in significant noise impacts at the residential, school, and park uses proposed along the highway under either Alternative 3 or the proposed project. Future traffic along SR-126 would cause mobile source noise levels at Travel Village to exceed acceptable noise levels, although the project applicant is required to mitigate highway noise at Travel Village regardless of which development scenario is selected.

However, because Alternative 3 would reduce the number of vehicle trips when compared to the proposed project, there would be less off-site noise impacts, so this alternative would result in fewer impacts than the proposed project relative to noise.

## (9) Air Quality

Under this alternative, short-term grading and construction-related air quality impacts would be reduced as compared to those of the proposed project, because under Alternative 3, a reduced amount of imported fill would be needed to elevate the site out of the floodplain.

As shown in Table 5.0-1, Estimated Alternative 3 Operational Emissions, long-term (i.e., operational) impacts for this alternative would also be reduced when compared to the proposed project as the number of operational traffic trips would be reduced because of the development of 286 fewer residential units, less commercial square footage and less private recreation areas.

**Table 5.0-1 Estimated Alternative 3 Operational Emissions** 

	Emissions in Pounds per Day <sup>1</sup>				
<b>Emissions Source</b>	CO	VOC	NOx	SOx	PM <sub>10</sub>
Summertime Emissions					
Mobile Sources	1,549.35	151.58	141.89	0.89	133.57
Area Sources					
Natural Gas	9.66	1.58	20.63		0.04
Wood Stoves	0	0	0	0	0
Fire Places	0	0	0	0	0
Landscape Maintenance	22.27	3.24	20.74	0.17	0.08
Architectural Coatings		30.86			
Consumer Products		60.51			
Area Source Subtotal	31.93	96.19	41.37	0.17	0.12
Alternative Mobile and Area Source Totals:	1,581.28	247.77	183.26	1.06	133.69
Project Mobile and Area Source Totals:	4,104.14	418.92	414.66	2.52	372.02
Recommended Threshold:	550.0	55.0	55.0	150.0	150.0
Alternative Exceeds Threshold?	YES	YES	YES	NO	NO
Wintertime Emissions					
Mobile Sources	1,503.65	133.47	204.68	0.73	133.57
Area Sources					
Natural Gas	9.66	1.58	20.63		0.04
Wood Stoves	0	0	0	0	0
Fire Places	3.28	0.45	7.71	0.05	0.62
Landscape Maintenance	0	0	0	0	0
Architectural Coatings		30.86			
Consumer Products		60.51			
Area Source Subtotal	12.95	93.41	28.34	0.05	0.66
Alternative Mobile and Area Source Totals:	1,516.60	226.88	233.02	0.78	134.23
Project Mobile and Area Source Totals:	5,741.55	2,023.47	605.22	4.89	244.44
Recommended Threshold:	550.0	55.0	55.0	150.0	150.0
Alternative Exceeds Threshold?	YES	YES	YES	NO	NO

Source: Impact Sciences, Inc. Emissions calculations are provided in Recirculated Draft EIR Appendix 5.0.

<sup>&</sup>lt;sup>1</sup> Emissions assume construction of sidewalks and/or pedestrian paths; direct pedestrian connections; street lighting; pedestrian signalization and signage; bike lanes/paths connecting to the bikeway system; no wood burning stoves; and residential and commercial insulation beyond Title 24 requirements.

Totals in table may not appear to add exactly due to rounding in the computer model calculations.

 $CO = carbon\ monoxide;\ VOC = volatile\ organic\ compounds;\ NO_x = oxides\ of\ nitrogen;\ SO_x = sulfur\ oxides;\ PM_{10} = fine\ particulate\ matter.$ 

Both the proposed project and this alternative would result in South Coast Air Quality Management District (SCAQMD) air quality thresholds being exceeded in the summertime for Carbon Monoxide (CO), Volatile Organic Compounds (VOC), and Oxides of Nitrogen (NO<sub>x</sub>). Wintertime emissions also would result in air quality thresholds being exceeded for CO, VOC, and NO<sub>x</sub>. However, unlike the proposed project, this alternative would not exceed the Particulate Matter (PM<sub>10</sub>) threshold and fewer emissions would be generated with this alternative. Consequently, based on this information, from an air quality standpoint, Alternative 3 would result in fewer impacts than the proposed project.

#### (10) Water Service

The Landmark Village project would generate a potable water demand of approximately 608 acre-feet per year (afy) and a non-potable demand of 364 afy. Potable water would be supplied to the project by the Valencia Water Company from local groundwater supplies. The Newhall Ranch Water Reclamation Plant (WRP), construction of which would likely begin simultaneously with the construction of the proposed project, would supply non-potable water to the project.

In comparison, the potable water demand for Alternative 3 would be 1,177 afy and the non-potable demand would be 281 afy, which represents an increase in potable water demand of 569 afy and a decrease in non-potable water demand of 83 afy when compared to the proposed project. The increase in potable water demand is due to the retention of approximately 79 acres of active agricultural land combined with urban development on the balance of this site. Given that less water demand is associated with the Landmark Village project compared with Alternative 3, Alternative 3 would result in greater impacts than the proposed project with respect to water service. As discussed further below, it may be difficult to cost effectively farm the agricultural acreage proposed under this alternative. Therefore, over the long term, it is possible that agricultural production under this alternative would not prove feasible. If this were the case and agricultural uses were discontinued, the potable water demand for Alternative 3 would be reduced, and would result in lower water usage when compared to the proposed project.

## (11) Wastewater Disposal

Wastewater generation for this alternative would be approximately 0.36 million gallons per day (mgd), which represents a decrease of 0.12 mgd when compared to the proposed project. As with the proposed project, this waste would be treated by the Newhall Ranch WRP. The treatment capacity of the Newhall Ranch WRP would be 6.8 mgd, with a maximum flow of 13.8 mgd. Until the development of the Newhall Ranch WRP is complete, there are two options for the temporary conveyance and treatment of wastewater generated by the proposed project. The first option is to construct an initial phase of the Newhall Ranch WRP to serve the project site, with build out of the WRP occurring over time as demand

for treatment increases. As the WRP is intended to serve the Newhall Ranch Specific Plan area, the initial phase of the WRP would be designed and constructed to accommodate the predicted wastewater generation of either the proposed project or Alternative 3. The second option would temporarily direct wastewater flows to the Valencia WRP until the first phase of the Newhall Ranch WRP is complete. Based on County Sanitation Districts of Los Angeles County (CSDLAC) future wastewater generation estimates and the planned expansion of the Saugus and Valencia WRPs, the Valencia WRP would have sufficient capacity to temporarily accommodate the project's predicted wastewater generation of 0.48 mgd, so the 0.36 mgd generated under Alternative 3 could also be accommodated. For these reasons, Alternative 3 would result in impacts similar to the proposed project with respect to wastewater generation and treatment despite the fact that Alternative 3 would generate less effluent.

## (12) Solid Waste Services

The project would generate 3,913 tons of solid waste per year. In comparison, Alternative 3 would generate 2,265 tons of solid waste per year resulting in a decrease of 1,648 tons per year of solid waste generated compared to the proposed project. To the extent Alternative 3 would generate less solid waste than the proposed project, this alternative would, therefore, result in fewer impacts than the proposed project relative to solid waste services.

## (13) Sheriff Services

The proposed project would result in a resident population of approximately 3,680 persons, which would increase the demand for law enforcement and traffic-related services on the project site and the local vicinity in terms of personnel and equipment. The proposed project would require the services of an additional four sworn officers. In comparison, Alternative 3 would result in a population of 3,213 persons. Given the Sheriff Department ratio of 1 officer per 1,000 persons, Alternative 3 would require the services of 3.2 officers, which is approximately one officer less than the proposed project, but would conservatively still require 4 additional officers.

The project applicant has entered into negotiations with the Sheriff's Department for the provision of a Sheriff station site within the Newhall Ranch Specific Plan boundary to serve buildout of uses within the Newhall Ranch Specific Plan. In addition, increased revenues generated by the project as it builds out (via motor vehicle registration fees paid by new on-site residents and businesses), would be available for funding additional staffing and equipment for the Sheriff and California Highway Patrol (CHP) to meet future demands. While Alternative 3 would reduce the demand for law enforcement equipment and personnel, there would be a concomitant reduction in tax revenue to fund ongoing law enforcement

efforts. Overall, however, from a sheriff services standpoint, Alternative 3 would result in impacts similar to the proposed project with respect to law enforcement.

## (14) Fire Protection Services

The Landmark Village project site is located in an area that has been designated as a Very High Fire Hazard Severity Zone (formerly called Fire Zone 4) by the County's Fire Department, which denotes the County Forester's highest fire hazard potential. Any land use constructed on the site would be required to meet all County codes and requirements relative to providing adequate fire protection services to the site during both the construction and operational stages of the project.

Since the number of housing units and square footage of commercial uses would be reduced under this alternative, the number of fire protection service calls to the project site presumably would also be reduced relative to the proposed project. However, this alternative would provide less tax revenue to fund ongoing fire protection services.

The project applicant is currently in discussions with the County's Fire Department on a Memorandum of Understanding (MOU) for the entire Newhall Ranch Specific Plan. At this time, it is expected that a new, permanent fire station would be constructed west of Long Canyon Road within the Landmark Village site and that this station would provide the fire protection services for the Landmark Village project. The fire station would be constructed under Alternative 3, as well. As a result, site development under either the proposed project or Alternative 3 would not diminish the staffing or the response times of existing fire stations in the Santa Clarita Valley, nor would it create a special fire protection requirement on the site that would result in a decline in existing service levels. Based on this information, Alternative 3 would result in similar impacts to the proposed project with respect to fire protection services.

## (15) Education

The Landmark Village project would generate an estimated 299 new elementary students, 138 new middle school students, and 173 new senior high school students for the two affected school districts at build out. Because Alternative 3 would reduce the number of dwelling units by 286 compared to the proposed project, fewer students would be generated by on-site uses.

Development of either the proposed project or Alternative 3 would be subject to the funding agreements established between the applicant and the affected districts. Given that all future development, including the proposed project or Alternative 3, must comply with existing school facilities funding agreements and other mechanisms (e.g., Senate Bill [SB] 50, the Valley-Wide Joint Fee Resolution, and/or new school

facilities funding agreements), Alternative 3 would result in impacts similar to the proposed project with respect to education.

#### (16) Parks and Recreation

The proposed Landmark Village project includes a 16-acre Community Park, consistent with the Specific Plan's Land Use Overlay Community Park designation for the area, 3.13 acres of the Specific Plan's Regional River Trail, and 4.10 acres of community trails. Implementation of these project components results in a parkland dedication equivalent to approximately 7.1 acres per 1,000 persons, which is greater than the County and Quimby Act requirements of 3.0 acres per 1,000 persons.

In comparison, development of Alternative 3 would provide a 16-acre community park, approximately 1.5 acres of Regional River Trail, and 2 acres of community trails. Implementation of these components would result in a parkland dedication equivalent to approximately 6.5 acres per 1,000 persons. While this figure would exceed the County and Quimby Act requirements of 3.0 acres per 1,000 persons, it represents less parkland per resident than would the proposed project. For this reason, Alternative 3 would result in greater impacts than the proposed project with respect to parks and recreation.

## (17) Library Services

Based on the adopted County library planning standard of 0.50 square foot of library facilities per capita and the adopted County library planning standard of 2.75 library books per capita, development of the proposed project would require a total of 1,840 square feet of library facilities and 10,120 items (books, magazines, periodicals, etc.). In comparison, Alternative 3 would require a total of 1,607 square feet of library facilities with 8,837 additional volumes of books for the library system's collection. This results in a decrease in demand of 233 square feet of library facilities and 1,283 library books when compared to the proposed project.

As part of the County's approval of the Newhall Ranch Specific Plan, the County adopted library mitigation requiring that the developer provide funding for the construction and development of library facilities on the Specific Plan site. This requirement would apply equally to Alternative 3, as well as to the proposed project. Therefore, while Alternative 3 would result in less demand for space and items than would the proposed project, Alternative 3 would result in impacts similar to the proposed project relative to library services because the demand for space and items would be met by construction and operation of the new libraries, as required by the Specific Plan mitigation.

## (18) Agricultural Resources

Development of the project site under this alternative would result in the loss of prime agricultural land and agricultural production, but less than the proposed project due to a smaller development footprint. Approximately 79 acres would remain available for farming under this alternative. From a practical standpoint it would be difficult to cost effectively manage and farm small, discontinuous agricultural areas within the project boundary. In addition, Alternative 3 would place residential uses directly adjacent to areas under agricultural cultivation, which could introduce incompatible land use and result in increased costs to farmers as they try to address residential complaints associated with the exposure to dust, odors, and similar intrusive conditions. Consequently, Alternative 3 would result in impacts similar to the proposed project with respect to agricultural resources.

#### (19) Utilities

Uses proposed by both the Landmark Village project or Alternative 3 are within the maximum development conditions permitted by the Newhall Ranch Specific Plan and the demand for energy (natural gas and electricity) was previously analyzed in the Newhall Ranch Specific Plan Program EIR. Since less development is planned under Alternative 3, energy use associated with this alternative would be less than that identified for the proposed Landmark Village project. However, projections for energy supply and demand by Southern California Edison and the Southern California Gas Company indicate that the utilities would have sufficient electricity and natural gas supply to serve the project site regardless of the development (proposed project or Alternative 3) selected. In addition, all development on the property would be required to comply with Title 24, Assembly Bill (AB) 970, and AB 32 energy conservation measures. In fact, the project applicant has committed to designing all residential and non-residential uses to be 15 percent more energy efficient than required by Title 24 (2005). Based on the above, Alternative 3 would result in impacts similar to the proposed project with respect to utilities.

## (20) Mineral Resources

This alternative would result in a smaller development footprint and requires less off-site grading than does the proposed project. As such, the potential for disturbance or over covering of any potential mineral resource deposits during site development would be reduced when compared to the proposed project. For this reason, Alternative 3 would result in fewer impacts than the proposed Landmark Village project with respect to mineral resources.

#### (21)**Environmental Safety**

The potential environmental safety impacts relative to development of the Landmark Village project site include soil contamination attributable to past and present agricultural activities, on-site petroleum (i.e., oil) drilling and pipeline activities, and the disposal of on-site hazardous materials debris. Future residents of either the proposed project or Alternative 3 could be subjected to these potential hazards unless remediated. For these reasons, Alternative 3 would result in impacts similar to the proposed project with respect to environmental safety.

#### (22)Cultural/Paleontological Resources

This alternative would result in a smaller development footprint and requires less off-site grading near to known archaeological and paleontological resources than does the proposed project. As such, the potential for disturbance to known cultural/paleontological resources during construction activities would be reduced when compared to the proposed project. For this reason, Alternative 3 would result in impacts lesser than the proposed Landmark Village project with respect to cultural/paleontological resources.

#### (23)**Conclusion on Environmental Analyses**

Generally, under Alternative 3, impacts associated with geotechnical and soil resources, hydrology, traffic/access, air quality, noise, biota, cultural/paleontological resources, visual qualities, solid waste services, mineral resources, and floodplain modifications would be reduced when compared to the proposed project. On the other hand, this alternative would have greater impacts associated with water service, water quality, and parks and recreation. However, on balance, Alternative 3 would result in fewer impacts than the proposed project. A summary comparison of impacts associated with the project alternatives is provided later in this section in Table 5.0-3, Alternatives Impact Comparison Matrix.

#### **Analysis of Project Objectives** e.

While Alternative 3 is considered environmentally superior to the proposed project, Alternative 3 does not meet many of the basic project objectives, which are set forth in this EIR, at Section 1.0, Project **Description**. Project objectives not fully met or impeded by Alternative 3 are listed below.

#### **(1)** Land Use Planning Objectives

Land Use Planning Objective No. 2 states, "Consistent with the Specific Plan, accommodate projected regional growth in a location that is adjacent to existing and planned infrastructure, urban services, transportation corridors, and major employment centers and that avoids leapfrog development."

Because Alternative 3 would significantly reduce housing and commercial uses, and, therefore, reduce accommodations for projected regional growth, this alternative is not consistent with this project objective.

Land Use Planning Objective No. 4 states, "Provide development and transitional land use patterns that do not conflict with surrounding communities and land uses."

Alternative 3 would create a fragmented area of agricultural property adjacent to residential and commercial uses and, therefore, does not meet this project objective.

Land Use Planning Objective No. 5 states, "Establish land uses that permit a wide range of housing densities, types, styles, prices, and tenancy (for sale and rental)."

Alternative 3 is inconsistent with this project objective, as it would result in a substantial reduction in residential units (approximately 20 percent reduction), thereby reducing housing options for the site.

Land Use Planning Objective No. 7 states: "Create a highly livable, pedestrian-friendly environment that encourages alternative means of transportation to the automobile by incorporating unique site designs and enhanced pedestrian access between land uses, trails, paseos, and streets."

Alternative 3 is inconsistent with this project objective because it would eliminate the majority of the commercial floor area on site, commercial uses that are necessary to promote livability of the project and the creation of a pedestrian friendly environment and enhanced pedestrian access between land uses.

## (2) Economic Objectives

Economic Objective No. 1 states, "Provide a variety of residential homes, which would respond and adjust to changing economic and market conditions."

Alternative 3 does not meet this project objective as the alternative results in a substantial reduction in residential units, thereby accommodating less housing for regional growth projections.

Economic Objective No. 2 states, "Provide a tax base to support public services and facilities."

Alternative 3 is inconsistent with this project objective as it would cause a substantial reduction in residential and commercial land use on site, resulting in a substantial reduction in tax base to support the public facilities and services within the project area.

## (3) Mobility Objectives

Mobility Objective No. 1 states, "Implement the Specific Plan's Mobility Plan, as it relates to the Landmark Village project, including the design of a circulation/mobility system that encourages alternatives to automobile use."

Alternative 3 does not meet this project objective because it is inconsistent with the Specific Plan's Mobility Plan and the circulation/mobility system within the Specific Plan. This alternative eliminates the majority of the commercial floor area on site, commercial uses that are necessary to promote livability of the project and the creation of a pedestrian friendly environment and enhanced pedestrian access between land uses.

## (4) Parks, Recreation, and Open Area Objectives

Parks, Recreation, and Open Area Objective No. 2 states, "Provide a range of recreational opportunities, including parks, trails and paseos, which are convenient and accessible."

Alternative 3 is inconsistent with this project objective because it would result in a substantial reduction in trails and paseos on the project site.

Parks, Recreation, and Open Area Objective No. 3 states, "Provide pedestrian, bicycle, and hiking trails that are consistent with the Specific Plan's Parks, Recreation, and Open Area Plan."

Alternative 3 does not meet this project objective because it would result in a design that is inconsistent with the Specific Plan's Park, Recreation, and Open Area Plan.

## f. Previous Findings Related to this Alternative

As noted above, the County's Board of Supervisors already considered Specific Plan alternatives, two of which eliminated development within the Santa Clara River, including the 100-year floodplain (e.g., Alternatives 5 and 6). The Board rejected both alternatives as infeasible, in part, because such alternatives did not achieve many of the basic objectives of the Specific Plan, including the significant public benefits associated with implementation of such a plan. In addition, the Board of Supervisors considered the issue of the loss of portions of the 100-year floodplain due to Specific Plan development, and found that the bulk of the impacted floodplain acreage (approximately 121 acres) is non-sensitive biota habitat primarily within agricultural lands and other disturbed habitat.

## g. Alternative 4 – Cluster Alternative

As shown on Figure 5.0-2, Cluster Alternative, the Cluster Alternative retains the overall layout of the proposed Landmark Village project, except this alternative would not result in the development of the westernmost 106 acres of the property, which would remain available for agricultural production. This alternative would reduce development by 507 dwelling units along with 828,000 square feet of commercial space when compared to the proposed project, for a total of 937 dwelling units and 205,000 square feet of commercial space. The Cluster Alternative would retain the 9-acre elementary school, 16-acre community park, and two of the four private recreation areas proposed as part of the Landmark Village project. Bank stabilization would continue to be required along the perimeter of the reduced development footprint fronting the river, the base of the Long Canyon Bridge, and the south side of the utility corridor extending to the Newhall Ranch Water Reclamation Plant site.

## (1) Potential Impacts

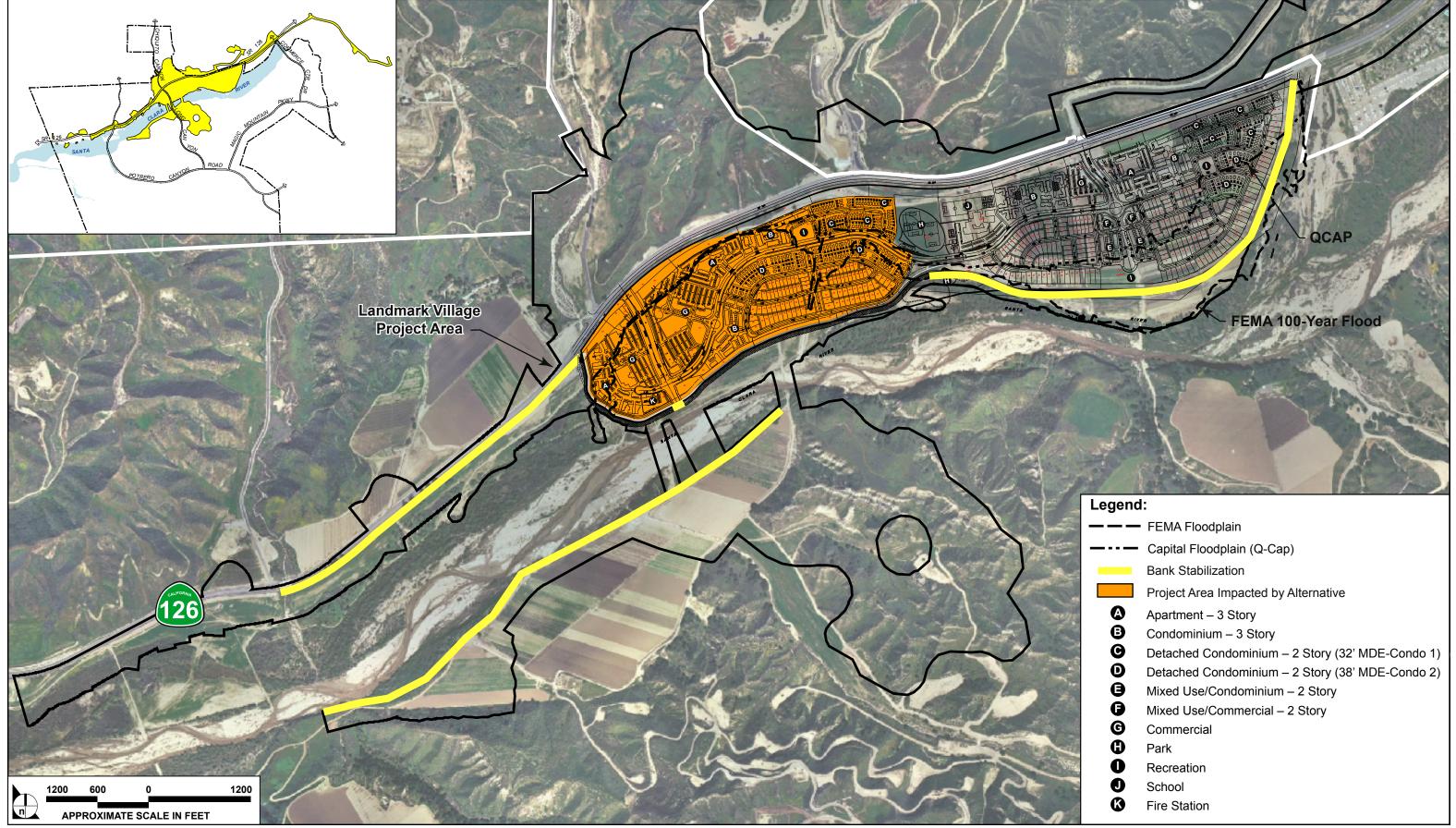
The following discussion compares the potential environmental impacts of this alternative to those associated with implementation of the proposed project.

### (a) Geotechnical and Soil Resources

Implementation of this alternative would result in less grading because of the reduced development footprint on the tract map site. This alternative would also reduce the amount of imported fill needed to develop the property. However, all improvements constructed on the site would be subjected to the forces of ground movement during seismic events similar to the proposed project and would also be subject to the same construction requirements as the proposed project. Because there would be less development under this alternative than under the proposed project, geotechnical hazards would be reduced, and, therefore, Alternative 4 would result in fewer impacts than the proposed project with respect to geology and soils.

## (b) Hydrology

Implementation of this alternative would result in slightly less storm runoff and more infiltration than the proposed project because less area would be developed resulting in more open area. Also, it is likely the landscape irrigation needs of Alternative 4 would be less than the proposed project due to less landscaped acreage. The urban runoff that is generated under this alternative would be conveyed and discharged into the Santa Clara River in a similar manner as the proposed project. This alternative would also reduce the amount of bank stabilization needed on site, because the development footprint fronting the river would be reduced. Consequently, this alternative would result in fewer impacts from a hydrology perspective than the proposed project.



SOURCE: Impact Sciences, Inc. - September 2006

FIGURE 5.0-2

## (c) Water Quality

Under either this alternative or the proposed project, PDFs incorporated into the development to address water quality and hydrologic impacts would include site design, source control, treatment control, and hydromodification control BMPs. In addition, flow control BMPs would be incorporated into the PDFs in order to comply with the Los Angeles Countywide SUSMP and County Interim Peak Flow Standard. The flow control BMPs for either development of the proposed project or Alternative 4 would include both source control and detention. The PDFs combined with the implementation of recommended mitigation measures would reduce water quality and hydromodification impacts to less than significant levels under either development scenario. However, this alternative could result in increased erosion due to the upland relocation of bank stabilization to accommodate the reduced development footprint and the associated potential for flood flows to erode the now unprotected area. For this reason, Alternative 4 would result in greater impacts than the proposed project from a water quality perspective.

## (d) Biota

Alternative 4 would result in less land disturbance at the Adobe Canyon borrow site, less impact to resources subject to CDFG and ACOE jurisdiction, and a reduction in land disturbance on the tract map site. Consequently, Alternative 4 would reduce the direct biological impacts compared to the proposed project. Furthermore, significant indirect impacts such as increased light and glare, increased non-native plant species and increased human and domestic animal presence would also be reduced as Alternative 4 represents a reduced development intensity and provides greater separation between resources in the River Corridor SMA and on-site development. For these reasons, Alternative 4 would result in fewer impacts than the proposed project relative to biota.

## (e) Floodplain Modifications

Alternative 4 would reduce the extent of floodplain modifications compared to the proposed project by removing the need to elevate portions of the site out of the floodplain. Consequently, floodplain modifications associated with construction and operation of Alternative 4 would result in fewer impacts on sensitive aquatic/riparian resources in the Santa Clara River corridor as this alternative would create slightly less increase in flows, water velocities, water depth, changes in sediment transport and changes in flooded areas. Although the Landmark Village project creates only minor hydraulic effects, which are insufficient to alter the amount, location, and nature of aquatic and riparian habitats in the project area and downstream, as well as insufficient to impact sensitive riparian species, including the unarmored threespine stickleback, arroyo toad, California red-legged frog, southwestern pond turtle and two-striped garter snake, Alternative 4 would result in fewer impacts than the proposed project relative to floodplain

modifications because it would create fewer hydraulic impacts due to the elimination of the need to elevate portions of the site from the floodplain.

## (f) Visual Qualities

Development of the site under Alternative 4 or the proposed project would be subject to Development Regulations and Design Guidelines contained in the Specific Plan. These regulations and guidelines address grading, lighting, fencing, landscaping, signage, architecture, and site planning for subsequent subdivisions within the Newhall Ranch Specific Plan. Despite such features, significant visual impacts would result from the change in the visual character of the site from rural to urban. As with the proposed Landmark Village project, Alternative 4 would significantly alter the visual characteristics of the Santa Clara River/SR-126 corridor, as existing open space views would be replaced with the images of residential development, roadways, and other human activity. However, significant impacts to views in Chiquito Canyon would be reduced under Alternative 4, as no development would occur on the western most portion of the site. While neither Alternative 4 nor the Landmark Village project is replacing prominent visual features, such as river vegetation or river bluffs, Alternative 4 would reduce disturbance at the Adobe Canyon borrow site compared to the proposed Landmark Village project.

Development under either the proposed project or Alternative 4 would introduce sources of outdoor illumination that do not presently exist. Outdoor lighting, such as streetlights and traffic signals, are essential safety features in development projects that involve new streets and intersections, and cannot be eliminated if the site is to be developed. In conclusion, Alternative 4 would result in fewer impacts than the proposed project relative to visual qualities because it would reduce views of development as observed from Chiquito Canyon and would reduce the grading at the Adobe Canyon borrow site.

## (g) Traffic and Access

Implementation of Alternative 4 would reduce the number of vehicle trips generated by on-site uses when compared to the proposed project. Specifically, using ITE *Trip Generation Manual* factors, average daily trip generation for the proposed project is estimated at 41,900 trips. In comparison, Alternative 4 would generate 28,498 trips, resulting in a reduction of 13,402 trips when compared to the proposed project. While there would be less traffic generated with this alternative, the Landmark Village project represents a balanced land plan that contains neighborhood-serving commercial uses that are connected to the residential areas by paseos and trails, thereby promoting alternative means of travel and keeping vehicle trips internal to the project. A reduction of 828,000 square feet of commercial uses as called for under Alternative 4 would likely cause some portion of these internal trips to leave the site as people seek needed goods or services at another location. Consequently, the reduction in motor vehicle trips

generated by on-site uses under Alternative 4 may not result in a proportional reduction in the number of project generated vehicle trips traveling along off-site roadway segments. Nevertheless, Alternative 4 would result in fewer impacts than the proposed project with respect to traffic, as the total number of trips would be reduced when compared to the proposed project.

#### (h) Noise

Under either Alternative 4 or the proposed project, development of the property would involve clearing and grading of the ground surface, installation of utility infrastructure, and the building of the proposed improvements. These activities typically involve the temporary use of heavy equipment, smaller equipment, and motor vehicles, which generate both steady static and episodic noise. This noise would primarily affect the occupants of on-site uses constructed in the earlier phases of the development (assuming that the site is occupied in sections as other portions are still under construction) and would be audible to occupants of Travel Village RV Park. Individuals who would have an uninterrupted line-of-sight to the construction noise sources could be exposed to noise levels which would exceed the County's Noise Ordinance standards during construction regardless of the development alternative selected. However, because Alternative 4 reduces the amount of imported fill required, there would be less grading activity and fewer heavy-truck trips when compared to the proposed project. For this reason, Alternative 4 would result in fewer impacts than the proposed project with regard to construction noise.

With respect to operational impacts, under either Alternative 4 or the proposed project, building occupants would be subject to traffic noise along SR-126 and on internal roadways, as well as noise from day-to-day activities at the site. Traffic along SR-126 would result in significant noise impacts at the residential, school, and park uses proposed along the highway under either Alternative 4 or the proposed project. Future traffic along SR-126 would cause mobile source noise levels at Travel Village to exceed acceptable noise levels, although the project applicant is required to mitigate highway noise at Travel Village regardless of which development scenario is selected.

However, because Alternative 4 would reduce the number of vehicle trips when compared to the proposed project, there would be less off-site noise impacts, so this alternative would result in fewer impacts overall than the proposed project relative to noise.

## (i) Air Quality

Under this alternative, short-term grading and construction-related air quality impacts would be reduced as compared to those of the proposed project, because under Alternative 4, a reduced amount of imported fill would be needed to construct the proposed project.

As shown in **Table 5.0-2**, **Estimated Alternative 4 Operational Emissions**, long-term (i.e., operational) impacts for this alternative would also be reduced when compared to the proposed project as the number of operational traffic trips would be reduced because of the development of 507 fewer residential units, less commercial square footage and less private recreation areas.

Table 5.0-2 Estimated Alternative 4 Operational Emissions

	Emissions in Pounds per Day <sup>1</sup>				
Emissions Source	CO	VOC	NOx	SOx	PM <sub>10</sub>
Summertime Emissions					
Mobile Sources	1,356.76	133.83	124.48	0.78	116.92
Area Sources					
Natural Gas	8.15	1.31	17.08		0.03
Wood Stoves	0	0	0	0	0
Fire Places	0	0	0	0	0
Landscape Maintenance	19.10	2.79	0.09	0.13	0.07
Architectural Coatings		25.65			
Consumer Products		48.91			
Area Source Subtotal	27.26	78.67	17.18	0.14	0.10
Alternative Mobile and Area Source Totals:	1,384.02	212.50	141.66	0.92	117.02
Project Mobile and Area Source Totals:	4,104.14	418.92	414.66	2.52	372.02
Recommended Threshold:	550.0	55.0	55.0	150.0	150.0
Alternative Exceeds Threshold?	YES	YES	YES	NO	NO
T					
Wintertime Emissions	1 210 11	115.00	450.50	0.44	114.00
Mobile Sources	1,319.11	117.39	179.52	0.64	116.92
Area Sources	0.1=		47.00		2.22
Natural Gas	8.15	1.31	17.08		0.03
Wood Stoves	0	0	0	0	0
Fire Places	2.65	0.36	6.23	0.04	0.50
Landscape Maintenance	0	0	0	0	0
Architectural Coatings		25.65			
Consumer Products		48.91			
Area Source Subtotal	10.81	76.24	23.32	0.04	0.54
Alternative Mobile and Area Source Totals:	1,329.92	193.63	202.84	0.68	117.46
Project Mobile and Area Source Totals:	5,741.55	2,023.47	605.22	4.89	244.44
Recommended Threshold:	550.0	55.0	55.0	150.0	150.0
Alternative Exceeds Threshold?	YES	YES	YES	NO	NO

Source: Impact Sciences, Inc. Emissions calculations are provided in Recirculated Draft EIR Appendix 5.0.

<sup>&</sup>lt;sup>1</sup> Emissions assume construction of sidewalks and/or pedestrian paths; direct pedestrian connections; street lighting; pedestrian signalization and signage; bike lanes/paths connecting to the bikeway system; no wood burning stoves; and residential and commercial insulation beyond Title 24 requirements.

Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Both the proposed project and this alternative would result in SCAQMD air quality thresholds being exceeded in the summertime for CO, VOC, and NO<sub>x</sub>. Wintertime emissions also would result in air quality thresholds being exceeded for CO, VOC, and NO<sub>x</sub>. However, unlike the proposed project, this alternative would not exceed the Particulate Matter (PM<sub>10</sub>) threshold and fewer emissions would be associated with this alternative. Consequently, based on this information, from an air quality standpoint, Alternative 4 would result in fewer impacts than the proposed project.

## (j) Water Service

The Landmark Village project would generate a potable water demand of approximately 608 afy and a non-potable demand of 364 afy. Potable water would be supplied to the project by the Valencia Water Company from local groundwater supplies. The Newhall Ranch WRP, construction of which would likely begin simultaneously with the construction of the proposed project, would supply non-potable water to the project.

In comparison, the potable water demand for Alternative 4 would be 1,320 afy and the non-potable water demand would be 248 afy. This represents an increase in potable water demand of 712 afy and a decrease in non-potable water demand of 116 afy when compared to the proposed project. The increase in potable water demand is due to the retention of approximately 106 acres of active agricultural land combined with urban development on the balance of this site. Given that less water demand is associated with the Landmark Village project compared with Alternative 4, Alternative 4 would result in greater impacts than the proposed project with respect to water service. As discussed further below, it may be difficult to cost effectively farm the agricultural acreage proposed under this alternative. Therefore, over the long term, it is possible that agricultural production under this alternative would not prove feasible. If this were the case and agricultural uses were discontinued, the potable water demand for Alternative 4 would be reduced; and, if reduced, would result in lower water usage when compared to the proposed project.

## (k) Wastewater Disposal

Wastewater generation for this alternative would be approximately 0.31 mgd, which represents a decrease of 0.17 mgd when compared to the proposed project. As with the proposed project, this waste would be treated by the Newhall Ranch WRP. The treatment capacity of the Newhall Ranch WRP would be 6.8 mgd, with a maximum flow of 13.8 mgd. Until the development of the Newhall Ranch WRP is complete, there are two options for the temporary conveyance and treatment of wastewater generated by the proposed project. The first option is to construct an initial phase of the Newhall Ranch WRP to serve the project site, with build out of the WRP occurring over time as demand for treatment increases. As the WRP is intended to serve the Newhall Ranch Specific Plan area, the initial phase of the WRP would be

designed and constructed to accommodate the predicted wastewater generation of either the proposed project or Alternative 4. The second option would temporarily direct wastewater flows to the Valencia WRP until the first phase of the Newhall Ranch WRP is complete. Based on CSDLAC future wastewater generation estimates and the planned expansion of the Saugus and Valencia WRPs, the Valencia WRP would have sufficient capacity to temporarily accommodate the project's predicted wastewater generation of 0.48 mgd, so the 0.31 mgd generated under Alternative 4 could also be accommodated. For these reasons, Alternative 4 would result in impacts similar to the proposed project with respect to wastewater generation and treatment despite the fact that Alternative 4 would generate less effluent.

#### (l) Solid Waste Services

The project would generate 3,913 tons of solid waste per year. In comparison, Alternative 4 would generate 1,911 tons of solid waste per year resulting in a decrease of 2,002 tons per year of solid waste generated compared to the proposed project. To the extent Alternative 4 would generate less solid waste than the proposed project, this alternative would, therefore, result in fewer impacts than the proposed project relative to solid waste services.

#### (m) Sheriff Services

The proposed project would result in a resident population of approximately 3,680 persons, which would increase the demand for law enforcement and traffic-related services on the project site and the local vicinity in terms of personnel and equipment. The proposed project would require the services of an additional four sworn officers. In comparison, Alternative 4 would result in a population of 2,601 persons. Given the Sheriff Department ratio of 1 officer per 1,000 persons, Alternative 4 would require the services of 2.6 officers, which is approximately one officer less than the proposed project.

The project applicant has entered into negotiations with the Sheriff's Department for the provision of a Sheriff station site within the Newhall Ranch Specific Plan boundary to serve the buildout of uses within the Newhall Ranch Specific Plan. In addition, increased revenues generated by the project as it builds out (via motor vehicle registration fees paid by new on-site residents and businesses), would be available for funding for additional staffing and equipment for the Sheriff and CHP to meet future demands. While Alternative 4 would reduce the demand for law enforcement equipment and personnel, there would be a concomitant reduction in tax revenue to fund ongoing law enforcement efforts. Overall, however, from a sheriff services standpoint, Alternative 4 would result in impacts similar to the proposed project with respect to law enforcement.

#### (n) Fire Protection Services

The Landmark Village project site is located in an area that has been designated as a Very High Fire Hazard Severity Zone (formerly called Fire Zone 4) by the County's Fire Department, which denotes the County Forester's highest fire hazard potential. Any land use constructed on the site would be required to meet all County codes and requirements relative to providing adequate fire protection services to the site during both the construction and operational stages of the project.

Since the number of housing units and square footage of commercial uses would be reduced under this alternative, the number of fire protection service calls to the project site presumably would also be reduced relative to the proposed project. However, this alternative would provide less tax revenue to fund ongoing fire protection services.

The project applicant is currently in discussions with the County's Fire Department on an MOU for the entire Newhall Ranch Specific Plan. At this time, it is expected that a new, permanent station would be located on the Landmark Village site west of Long Canyon Road and it would provide the fire protection services for the Landmark Village project. The fire station would be constructed under Alternative 4, as well. As a result, site development under either the proposed project or Alternative 4 would not diminish the staffing or the response times of existing fire stations in the Santa Clarita Valley, nor would it create a special fire protection requirement on the site that would result in a decline in existing service levels. Based on this information, Alternative 4 would result in impacts similar to the proposed project with respect to fire protection services.

## (o) Education

The Landmark Village project would generate an estimated 299 new elementary students, 138 new middle school students, and 173 new senior high school students for the two affected school districts at build out. Because Alternative 4 would reduce the number of dwelling units by 507 compared to the proposed project, fewer students would be generated by on-site uses.

Development of either the proposed project or Alternative 4 would be subject to the funding agreements established between the applicant and the affected districts. Given that all future development, including the proposed project or Alternative 4, must comply with existing school facilities funding agreements and other mechanisms (e.g., SB 50, the Valley-Wide Joint Fee Resolution, and/or new school facilities funding agreements), Alternative 4 would result in impacts similar to the proposed project with respect to education.

## (p) Parks and Recreation

The proposed Landmark Village project includes a 16-acre Community Park, consistent with the Specific Plan's Land Use Overlay Community Park designation for the area, 3.13 acres of the Specific Plan's Regional River Trail, and 4.10 acres of community trails. Implementation of these project components results in a parkland dedication equivalent to approximately 7.1 acres per 1,000 persons, which is greater than the County and Quimby Act requirements of 3.0 acres per 1,000 persons.

In comparison, development of Alternative 4 would provide a 16-acre community park, approximately 1.5 acres of Regional River Trail, and 2 acres of community trails. Implementation of these components would result in a parkland dedication equivalent to approximately 8.3 acres per 1,000 persons. Not only would this figure exceed the County and Quimby Act requirements of 3.0 acres per 1,000 persons, it also represents more parkland per resident than would the proposed project. For this reason, Alternative 4 would result in fewer impacts than the proposed project with respect to parks and recreation.

## (q) Library Services

Based on the adopted County library planning standard of 0.50 square feet of library facilities per capita and the adopted County library planning standard of 2.75 library books per capita, development of the proposed project would require a total of 1,840 square feet of library facilities and 10,120 items (books, magazines, periodicals, etc.). In comparison, Alternative 4 would require a total of 1,300 square feet of library facilities with 7,151 additional volumes of books for the library system's collection. This results in a decrease in demand of 540 square feet of library facilities and 2,969 library books when compared to the proposed project.

As part of the County's approval of the Newhall Ranch Specific Plan, the County adopted library mitigation requiring that the developer provide funding for the construction and development of library facilities on the Specific Plan site. This requirement would apply equally to Alternative 4, as well as to the proposed project. Therefore, while Alternative 4 would result in less demand for space and items than would the proposed project, Alternative 4 would result in impacts similar to the proposed project because, under either the proposed project or Alternative 4, the demand for space and items would be met by construction and operation of the new libraries, as required by the Specific Plan mitigation.

## (r) Agricultural Resources

Development of the project site under this alternative would result in the loss of prime agricultural land and agricultural production, but less than the proposed project due to a smaller development footprint. Approximately 106 acres would remain available for farming under this alternative. From a practical

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standpoint, it would be difficult to cost effectively manage and farm a small, discontinuous agricultural area within the project boundary. In addition, Alternative 4 would place residential uses directly adjacent to areas under agricultural cultivation, which could introduce incompatible land use and result in increased costs to farmers as they try to address residential complaints associated with the exposure to dust, odors, and similar intrusive conditions. Consequently, Alternative 4 would result in impacts similar to the proposed project with respect to agricultural resources.

## (s) Utilities

Uses proposed by both the Landmark Village project or Alternative 4 are within the maximum development conditions permitted by the Newhall Ranch Specific Plan and the demand for energy (natural gas and electricity) was previously analyzed in the Newhall Ranch Specific Plan Program EIR. Since less development is planned under Alternative 4, energy use associated with this alternative would be less than that identified for the proposed Landmark Village project. However, projections for energy supply and demand by Southern California Edison and the Southern California Gas Company indicate that the utilities would have sufficient electricity and natural gas supply to serve the project site regardless of the development (proposed project or Alternative 4) selected. In addition, all development on the property would be required to comply with Title 24, AB 970, and AB 32 energy conservation measures. The project applicant also has committed to designing all residential and non-residential uses to be 15 percent more energy efficient than required by Title 24 (2005). Based on the above, Alternative 4 would result in impacts similar to the proposed project with respect to utilities.

#### (t) Mineral Resources

This alternative would result in a smaller development footprint and requires less off-site grading than does the proposed project. As such, the potential for disturbance or over covering of any potential mineral resource deposits during site development would be reduced when compared to the proposed project. For this reason, Alternative 4 would result in fewer impacts than the proposed Landmark Village project with respect to mineral resources.

## (u) Environmental Safety

The potential environmental safety impacts relative to development of the Landmark Village project site include soil contamination attributable to past and present agricultural activities, on-site petroleum (i.e., oil) drilling and pipeline activities, and the disposal of on-site hazardous materials debris. Future residents of either the proposed project or Alternative 4 could be subjected to these potential hazards unless remediated. For these reasons, Alternative 4 would result in impacts similar to the proposed project with respect to environmental safety.

## (v) Cultural/Paleontological Resources

This alternative would result in a smaller development footprint and requires less off-site grading than does the proposed project. As such, the potential for disturbance to known archaeological and paleontologic resources during construction activities would be reduced when compared to the proposed project. For this reason, Alternative 4 would result in fewer impacts than the proposed Landmark Village project with respect to cultural/paleontological resources.

## (w) Conclusion on Environmental Analyses

Generally, under Alternative 4, impacts associated with geotechnical and soil resources, hydrology, traffic/access, air quality, noise, biota, cultural/paleontological resources, visual qualities, solid waste services, parks and recreation, mineral resources, and floodplain modifications would be reduced when compared to the proposed project. On the other hand, this alternative would have greater impacts associated with water service and water quality. However, on balance, Alternative 4 would result in fewer impacts than the proposed project. A summary comparison of impacts associated with the project alternatives is provided in **Table 5.0-3**, **Alternatives Impact Comparison Matrix**.

Table 5.0-3
Alternatives Impact Comparison Matrix

Environmental Topic	Alternative 1 No Project/No Development	Alternative 2 No Project/Future Development	Alternative 3 FEMA Floodplain Avoidance	Alternative 4 Cluster
Geotechnical and Soil Resources	L	S	L	L
Hydrology	L	S	L	L
Traffic/Access	L	S	L	L
Air Quality	L	S	L	L
Noise	L	S	L	L
Biota	L	S	L	L
Cultural/Paleontological Resources	L	S	L	L
Visual Qualities	L	S	L	L
Water Service	L	S	$G^1$	$G^1$
Wastewater Disposal	L	S	S	S
Solid Waste Services	L	S	L	L
Education	L	S	S	S

Environmental Topic	Alternative 1 No Project/No Development	Alternative 2 No Project/Future Development	Alternative 3 FEMA Floodplain Avoidance	Alternative 4 Cluster
Library Services	L	S	S	S
Fire Protection Services	L	S	S	S
Parks and Recreation	L	S	G	L
Water Quality	S	S	G	G
Agricultural Resources	L	S	S	S
Sheriff Services	L	S	S	S
Environmental Safety	L	S	S	S
Mineral Resources	L	S	L	L
Floodplain Modifications	L	S	L	L
Utilities	L	S	S	S

KEY (Level of Impact in Comparison to the Proposed Project):

## (2) Analysis of Project Objectives

While Alternative 4 is considered environmentally superior to the proposed project, Alternative 4 does not meet many of the basic project objectives, which are set forth in this EIR, at **Section 1.0**, **Project Description**. Project objectives not fully met or impeded by Alternative 4 are listed below.

## (a) Land Use Planning Objectives

Land Use Planning Objective No. 2 states, "Consistent with the Specific Plan, accommodate projected regional growth in a location that is adjacent to existing and planned infrastructure, urban services, transportation corridors, and major employment centers and that avoids leapfrog development."

Because Alternative 4 would significantly reduce housing and commercial uses, and, therefore, reduce accommodations for projected regional growth, this alternative is not consistent with this project objective.

**G** = Alternative Produces Greater Level of Impact.

**S** = Alternative Produces Similar Level of Impact.

L = Alternative Produces Lesser Level of Impact.

<sup>&</sup>lt;sup>1</sup> If long-term agricultural uses in conjunction with the project's urban uses are not feasible, water usage would be less than the proposed project.

Land Use Planning Objective No. 4 states, "Provide development and transitional land use patterns that do not conflict with surrounding communities and land uses."

Alternative 4 would create a fragmented area of agricultural property adjacent to residential and commercial uses and, therefore, does not meet this project objective.

Land Use Planning Objective No. 5 states, "Establish land uses that permit a wide range of housing densities, types, styles, prices, and tenancy (for sale and rental)."

Alternative 4 is inconsistent with this project objective because it would result in a substantial reduction in residential units (approximately 35 percent reduction), thereby reducing the housing options for the site.

Land Use Planning Objective No. 7 states: "Create a highly livable, pedestrian-friendly environment that encourages alternative means of transportation to the automobile by incorporating unique site designs and enhanced pedestrian access between land uses, trails, paseos, and streets."

Alternative 4 is inconsistent with this project objective because it would eliminate the majority of the commercial floor area on site, commercial uses that are necessary to promote livability of the project and the creation of a pedestrian friendly environment and enhanced pedestrian access between land uses.

#### (b) Economic Objectives

Economic Objective No. 1 states, "Provide a variety of residential homes, which would respond and adjust to changing economic and market conditions."

Alternative 4 does not meet this project objective as the alternative results in a substantial reduction in residential units, thereby accommodating less housing for regional growth projections.

Economic Objective No. 2 states, "Provide a tax base to support public services and facilities."

Alternative 4 is inconsistent with this project objective because it would cause a substantial reduction in residential and commercial land use on site, resulting in a substantial reduction in tax base to support the public facilities and services within the project area.

## (c) Mobility Objectives

Mobility Objective No. 1 states, "Implement the Specific Plan's Mobility Plan, as it relates to the Landmark Village project, including the design of a circulation/mobility system that encourages alternatives to automobile use."

Alternative 4 does not meet this project objective because it is inconsistent with the Specific Plan's Mobility Plan and the circulation/mobility system within the Specific Plan. This alternative eliminates the majority of the commercial floor area on site, commercial uses that are necessary to promote livability of the project and the creation of a pedestrian friendly environment and enhanced pedestrian access between land uses.

## (d) Parks, Recreation, and Open Area Objectives

Parks, Recreation, and Open Space Objective No. 2 states, "Provide a range of recreational opportunities, including parks, trails and paseos, which are convenient and accessible."

Alternative 4 is inconsistent with this project objective because it would result in a substantial reduction in trails and paseos on the project site.

Parks, Recreation, and Open Space Objective No. 3 states, "Provide pedestrian, bicycle, and hiking trails that are consistent with the Specific Plan's Parks, Recreation, and Open Area Plan."

Alternative 4 is inconsistent with this project objective because it would result in a design that is inconsistent with the Specific Plan's Park, Recreation, and Open Area plan.

## (3) Previous Findings Related to this Alternative

As noted above, the County's Board of Supervisors already considered Specific Plan alternatives, one of which clustered development, creating higher housing concentrations in the Low–Medium and other land use designations (e.g., Alternative 3). The Board rejected this alternative as infeasible, in part, because it did not achieve many of the basic objectives of the Specific Plan, including the significant public benefits associated with implementation of such a plan. In addition, the Board of Supervisors rejected this alternative because it too narrowly limited the range of housing opportunities provided and did not reflect market conditions and growth in the region.

## 5. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

**Table 5.0-3**, provides a summary comparison of the alternatives discussed in this section in relation to environmental impacts. Based on the information in this section, the No Project/No Development Alternative would not result in adverse (or beneficial) effects and, therefore, the No Project/No Development Alternative is the environmentally superior alternative. However, the No Project/No Development Alternative is not consistent with the policies and goals of the Specific Plan and fails to meet any of the basic project objectives.

As specified in the *State CEQA Guidelines* (Section 15126(d)(2)), if the No Project/No Development Alternative is the environmentally superior alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. Of the other alternatives considered, Alternative 4, the Cluster Alternative, would be the environmentally superior alternative because this alternative entails the least amount of development and, correspondingly, the least amount of developmental impacts.

# 6.0 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

### 1. PURPOSE

Uses of nonrenewable resources during the initial and continued phases of a proposed project may be irreversible if a large commitment of these resources makes their restoration thereafter unlikely. According to Section 15126(c) of the California Environmental Quality Act (CEQA) Guidelines, the irretrievable commitment of such resources is to be evaluated to ensure that their consumption by a proposed project is justified. In addition, this section also must identify any irreversible damage that can result from environmental accidents associated with the proposed project.

## 2. DISCUSSION

The certified Newhall Ranch Specific Plan Program EIR fully evaluated the significant irreversible environmental changes that would be involved with buildout of the entire Specific Plan. The certified EIR concluded that buildout of the Specific Plan would commit presently undeveloped lands to urbanized uses and contribute to the incremental depletion of resources, including renewable as well as slowly renewable or non-renewable resources. The certified EIR also concluded that no unique hazards are found on either Newhall Ranch or the Water Reclamation Plant (WRP) site and that neither site contains any uniquely hazardous uses. No changes in the Specific Plan or its circumstances have occurred since the Newhall Ranch Specific Plan Program EIR was certified in May 2003. In light of this fact, and given that the proposed Landmark Village project is consistent with the land uses in the Specific Plan, the prior Newhall Ranch Specific Plan Program EIR adequately addresses the significant irreversible environmental changes associated with the Newhall Ranch Specific Plan, including the Landmark Village project, and the Landmark Village project would not have any effects that were not previously examined in that certified EIR. Consistent with *State CEQA Guidelines* Sections 15152, 15168, and 15385, this analysis incorporates by reference the discussions and analysis contained in the certified Newhall Ranch Specific Plan Program EIR, and no further evaluation is required.

#### 1. PURPOSE

The California Environmental Quality Act (CEQA) requires a discussion of the ways in which a project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this discussion are projects, which would remove obstacles to population growth. Such discussion also should include the characteristics of a project, which may encourage and/or facilitate other activities that, either individually or cumulatively, could significantly affect the environment. CEQA emphasizes that growth in an area should not be considered beneficial, detrimental, or of little significance. The purpose of this section is to evaluate the growth-inducing potential of the proposed Landmark Village project.

#### 2. GROWTH-INDUCEMENT POTENTIAL

The certified Newhall Ranch Specific Plan Program EIR fully evaluated the growth-inducing impacts of buildout of the entire Newhall Ranch Specific Plan. The analysis concluded that the Specific Plan could potentially induce growth within Ventura County, the Santa Clara River Valley, and the Santa Clarita Valley due to the construction of supporting infrastructure and increased demand for goods and services. No changes in the Specific Plan or its circumstances have occurred since the Newhall Ranch Specific Plan Program EIR was certified in May 2003. In light of this fact, and given that the proposed Landmark Village project is consistent with the land uses in the Specific Plan, the prior Newhall Ranch Specific Plan Program EIR adequately addresses the growth-inducing impacts of the Newhall Ranch Specific Plan, including the Landmark Village project, and the Landmark Village project would not have any growth inducing impacts that were not previously examined in that certified EIR. Consistent with *State CEQA Guidelines* Sections 15152, 15168, and 15385, this analysis incorporates by reference the discussions and analysis contained in the certified Newhall Ranch Specific Plan Program EIR pertaining to the growth-inducing potential of the Specific Plan, and no further evaluation is required.

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase					
4.1 GEOT	FECHNICAL AND SOIL RESOURCES									
SP 4.1-1.	The standard building setbacks from ascending and descending man-made slopes are to be followed in accordance with Section 1806.4 of the Los Angeles County Building Code, unless superseded by specific geologic and/or soils engineering evaluations. (Allan E. Seward Engineering Geology, Inc., 19 September 1994, p. 44)	are to be followed in accordance with Section 1806.4 of the Los Engineer, Grading P s County Building Code, unless superseded by specific geologic Geotechnical Check soils engineering evaluations. (Allan E. Seward Engineering Engineer,	Building and Grading Plan Check	1.	Los Angeles County Department of Public Works (LACDPW), Geology/Soils Section, and Building and Safety					
			Geologist)	Geologist)	Geologist)	Geologist)	Geologist)	2.	2.	LACDPW, Building and Safety and Geology/Soils Section
				3.	Prior to Issuance of Building Permits					
SP 4.1-2.	The existing Grading Ordinance for planting and irrigation of cut-slopes and fill slopes is to be adhered to for grading operations within the project	Applicant (Civil Engineer)	Field Verification	1.	LACDPW, Building and Safety					
	site. (Allan E. Seward Engineering Geology, Inc., 19 September 1994, p. 44)						2.	LACDPW, Building and Safety		
				3.	Prior to Issuance of Occupancy Permits					
SP 4.1-3.	In order to safeguard against major seismic-related structural failures, all buildings within the project boundaries are to be constructed in	Applicant (Project Structural	Building Plan Check	1.	LACDPW, Building and Safety					
	conformance with the Los Angeles County Uniform Building Code, as applicable.	Engineer)		2.	LACDPW, Building and Safety					
				3.	Prior to Issuance of Building Permits					
SP 4.1-4.	The location and dimensions of the exploratory trenches and borings undertaken by Allan E. Seward Engineering Geology, Inc. and R.T. Frankian	Applicant (Geotechnical	Grading Plan Check	1.	LACDPW, Geology/Soils Section					
	& Associates are to be noted on all grading plans relative to future building plans, unless the trenches and/or borings are removed by future grading	s are removed by future grading the trenches or borings, they are ect Geotechnical Engineer. (Allan	Field	2.	LACDPW, Geology/Soils Section					
	operations. If future foundations traverse the trenches or borings, they are to be reviewed and approved by the project Geotechnical Engineer. (Allan E. Seward Engineering Geology, Inc., 19 September 1994, p. 45)		Verification	3.	Prior to Approval of Final Grading Plans; grading					

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	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.1 GEOT	ECHNICAL AND SOIL RESOURCES (cont.)				
SP 4.1-6.	Should any expansive soils be encountered during grading operations, they are not to be placed nearer the finished surface than 8 feet below the bottom of the subgrade elevation. This depth is subject to revision depending upon the expansive potential measured during grading. (R.T. Frankian & Associates, 19 September 1994, Appendix I)	Applicant (Geotechnical Engineer) Grading	Field Investigation	<ol> <li>2.</li> </ol>	LACDPW, Geology/Soils Section LACDPW, Geology/Soils Section
SP 4.1-7.	If expansive materials are encountered at subgrade elevation in cut areas, the soils are to be removed to a depth of 8 feet below the "finished" or	Contractor  Applicant (Geotechnical	Field Investigation	3. 1.	During Grading LACDPW, Geology/Soils Section
	"subgrade" surface and the excavated area backfilled with nonexpansive, properly compacted soils. This depth is subject to revision depending upon the expansive potential measured during grading. (R.T. Frankian & Associates, 19 September 1994, Appendix I)	Engineer)		2.	LACDPW, Geology/Soils Section During Grading
SP 4.1-8.	At the time of subdivision, which allows construction, areas subject to liquefaction are to be mitigated to the satisfaction of the project Geotechnical Engineer prior to site development. (R.T. Frankian & Associates, 19 September 1994, Appendix I)	Applicant (Geotechnical Engineer)	Grading Plan Check Field	<ol> <li>2.</li> </ol>	LACDPW, Geology/Soils Section LACDPW, Geology/Soils Section
			Verification	3.	Prior to Issuance of Grading Permit(s)
SP 4.1-9.	Subdrains are to be placed in areas of high ground water conditions (Potrero Canyon, in particular) or wherever extensive irrigation is planned.	Applicant (Geotechnical	Grading Plan Check	1.	LACDPW, Geology/Soils Section
	The systems are to be designed to the specifications of the Newhall Ranch Specific Plan Geotechnical Engineer.	Engineer and Engineering Geologist)	Field	2.	LACDPW, Geology/Soils Section
		Scologisty	Verification	3.	Prior to Issuance of Grading Permit and Verify During Grading

4.1 GEOT	Mitigation Measures/Conditions of Approval ECHNICAL AND SOIL RESOURCES (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.1-10.		Applicant (Geotechnical	Grading Plan Check	1.	LACDPW, Geology/Soils Section
	the Geotechnical Engineer during grading operations. (R.T. Frankian & Associates, 19 September 1994, Appendix I)	Engineer and Engineering	Field	2.	LACDPW, Geology/Soils Section
	Geologist)	Geologist)	Verification	3.	Prior to Issuance of Grading Permit and Verify During Grading
SP 4.1-12.	The vertical spacing of subdrains behind buttress fills, stabilization blankets, etc., are to be a maximum of 15 feet. The gradient is to be at least 2 percent		Grading Plan Check	1.	LACDPW, Geology/Soils Section
	to the discharge end. (R.T. Frankian & Associates, 19 September 1994, Appendix I)	Engineer)	Field	2.	LACDPW, Geology/Soils Section
			Verification	3.	Prior to Issuance of Grading Permit and Verify During Grading
SP 4.1-13.	Geological materials subject to hydroconsolidation (containing significant void space) are to be removed prior to the placement of fill. Specific	Applicant (Geotechnical	Receipt of Specific Hydro-	1.	LACDPW, Geology/Soils Section
	recommendations relative to hydroconsolidation are to be provided by the project Geotechnical Engineer at the subdivision stage. (Allan E. Seward	Engineer and Engineering	consolidation Recommend-	2.	LACDPW, Geology/Soils Section
	Engineering Geology, Inc., 19 September 1994, p. 44)	Field	ations Field Verification	3.	Prior to Approval of Final Grading Plans and Verify During Grading

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase	
4.1 GEOT	ECHNICAL AND SOIL RESOURCES (cont.)					
SP 4.1-15.	of the landslides shown on the geologic map. This work shall be undertaken at the subdivision stage. (Allan E. Seward Engineering Geology, Inc., 19 September 1994, p. 15) Landslides must be mitigated through stabilization,	Applicant (Geotechnical Engineer and Engineering	Receipt of Exploratory Data and Mitigation	<ol> <li>2.</li> </ol>	LACDPW, Geology/Soils Section LACDPW, Geology/Soils Section	
	removal, and/or building setbacks as determined by the Newhall Ranch Specific Plan Geotechnical Engineer, and to the satisfaction of the Los Angeles County Department of Public Works.	Geologist)	Field Verification	3.	Prior to Approval of Final Grading Plan and Verify During Grading	
SP 4.1-19.	Remove debris from surficial failures during grading operations prior to the placement of fill. (Allan E. Seward Engineering Geology, Inc., 19 September	Applicant (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section	
	1994, p. 16)	Engineer)	Engineer)	2.	LACDPW, Geology/Soils Section	
				3.	<b>During Grading Operations</b>	
SP 4.1-20.	All soils and/or unconsolidated slopewash and landslide debris is to be removed prior to the placement of compacted fills. (Allan E. Seward	Applicant Gi (Geotechnical	Grading Plan Check	1.	LACDPW, Geology/Soils Section	
	Engineering Geology, Inc., 19 September 1994, p. 45)	Engineer and Engineering	Field	2.	LACDPW, Geology/Soils Section	
	Geologist)	Geologist)	Verificat	Verification	3.	Prior to approval of Final Grading Plan and During Grading
SP 4.1-29.	Orientations of the bedrock attitudes are to be evaluated by the Newhall Ranch Specific Plan Engineering Geologist to identify locations of required	Applicant (Geotechnical	Grading Plan Check	1.	LACDPW, Geology/Soils Section	
	buttress fills. Buttress fill design and recommendations, if necessary, are to be presented as mitigation during the grading plan stage. (R.T. Frankian & Associates, 19 September 1994, Appendix I)	Engineer and Engineering Geologist)	Field	2.	LACDPW, Geology/Soils Section	
	Associates, 17 September 1774, Appendix 1)	Geologist)	Verification	3.	Prior to Approval of Final Grading Plans	

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase	
4.1 GEOT	ECHNICAL AND SOIL RESOURCES (cont.)	<u>-</u>			-	
SP 4.1-30.	All fills, unless otherwise specifically designed, are to be compacted to at least 90 percent of the maximum dry unit weight as determined by ASTM Designation D 1557-91 Method of Soil Compaction. (R.T. Frankian &	Applicant (Geotechnical Engineer)	Field Verification	1.	Section	
	Associates, 19 September 1994, Appendix I)	8/		2.	LACDPW, Geology/Soils Section	
				3.	During Grading	
SP 4.1-31.	No fill is to be placed until the area to receive the fill has been adequately prepared and approved by the Geotechnical Engineer. (R.T. Frankian & Associates, 19 September 1994, Appendix I)			1.	LACDPW, Geology/Soils Section, Building and Safety	
					ngineer)	2.
				3.	During Grading	
SP 4.1-32.	Fill soils are to be kept free of all debris and organic material. (R.T. Frankian & Associates, 19 September 1994, Appendix I)	1 1	(Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
				2.	LACDPW, Geology/Soils Section, Building and Safety	
				3.	During Grading	
SP 4.1-33.	Rocks or hard fragments larger than 8 inches are not to be placed in the fill without approval of the Geotechnical Engineer, and in a manner specified	Applicant (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety	
	for each occurrence. (R.T. Frankian & Associates, 19 September 1994, Appendix I)	Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety	
				3.	During Grading	
SP 4.1-34.	finished pad grade or the subgrade of roadways or within 15 feet of a slope	Applicant (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety	
	face. (R.T. Frankian & Associates, 19 September 1994, Appendix I)	Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety	
				3.	During Grading	

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase	
4.1 GEOTECHNICAL AND SOIL RESOURCES (cont.)	_			-	
SP 4.1-35. Rock fragments larger than 8 inches may be placed in windrows, below th limits given above, provided the windrows are spaced at least 5 fee	et (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety	
vertically and 15 feet horizontally. Granular soil must be flooded aroun- windrows to fill voids between the rock fragments. The granular soil is to be wheel rolled to assure compaction. (R.T. Frankian & Associates, 1	e		2.	LACDPW, Geology/Soils Section, Building and Safety	
September 1994, Appendix I)	,		3.	During Grading	
SP 4.1-36. The fill material is to be placed in layers which, when compacted, is not t exceed 8 inches per layer. Each layer is to be spread evenly and is to b	e (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety	
thoroughly mixed during the spreading to insure uniformity of material and moisture. (R.T. Frankian & Associates, 19 September 1994, Appendix I)	d Engineer)				2.
			3.	During Grading	
SP 4.1-37. When moisture content of the fill material is too low to obtain adequate compaction, water is to be added and thoroughly dispersed until the soil is	s (Geotechnical	Field Verification		1.	LACDPW, Geology/Soils Section, Building and Safety
approximately 2 percent over optimum moisture content. (R.T. Frankian & Associates, 19 September 1994, Appendix I)	& Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety	
			3.	During Grading	
SP 4.1-38. When the moisture content of the fill material is too high to obtain adequate compaction, the fill material is to be aerated by blading or other satisfactors.	y (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety	
methods until the soil is approximately two percent over optimum moistur content. (R.T. Frankian & Associates, 19 September 1994, Appendix I)	e Engineer)	gineer)	2.	LACDPW, Geology/Soils Section, Building and Safety	
			3.	During Grading	
SP 4.1-39. Where fills toe out on a natural slope or surface, a keyway, with a minimum width of 16 feet and extending at least 3 feet into firm, natural soil, is to be	e (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety	
cut at the toe of the fill. (R.T. Frankian & Associates, 19 September 1994 Appendix I)	1, Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety	
			3.	During Grading	

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.1 GEOT	TECHNICAL AND SOIL RESOURCES (cont.)	<u> </u>			<u> </u>
SP 4.1-40.	10. Where the fills toe out on a natural or cut slope and the natural or cut slope is steeper than 5 horizontal to 1 vertical, a drainage bench with a width of at	Applicant (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
	least 8 feet is to be established at the toe of the fill. Fills may be placed over cut slopes if the visible contact between the fill and cut is steeper than 45 degrees. (R.T. Frankian & Associates, 19 September 1994, Appendix I)	d cut is steeper than 45		2.	LACDPW, Geology/Soils Section, Building and Safety
	degrees. (K.1. Frankian & Associates, 19 September 1994, Appendix 1)		3.	During Grading	
SP 4.1-41.	competent material, approved by the Geotechnical Engineer, with vertical (Geotechnical benches not less than 4 feet. (R.T. Frankian & Associates, 19 September 1994, Appendix I) Competent material is defined as being free of loose soil, heavy Engineering	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety	
		Engineering	ng	2.	LACDPW, Geology/Soils Section, Building and Safety
	fracturing, or compressive soils.	Geologist)		3.	During Grading
SP 4.1-42.	When constructing fill slopes, the grading contractor is to avoid spillage of loose material down the face of the slope during the dumping and	Applicant (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
	compacting operations. (R.T. Frankian & Associates, 19 September 1994, Appendix I)	Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety
				3.	During Grading
SP 4.1-43.	compactor over the top of the slope, and thoroughly covering all of the	Applicant (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
	slope surface with overlapping passes of the compactor. Compaction of the slope is to be repeated after each 4 feet of fill has been placed. The required	Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety
	compaction must be obtained prior to placement of additional fill. As an alternate, the slope can be overbuilt and cut back to expose a compacted core. (R.T. Frankian & Associates, 19 September 1994, Appendix I)			3.	During Grading

4.1 GEOT	Mitigation Measures/Conditions of Approval ECHNICAL AND SOIL RESOURCES (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase	
	All artificial fill associated with past petroleum activities as well as other existing artificial fill, are to be evaluated by the Newhall Ranch Specific Plan Geotechnical Engineer at the subdivision and/or Grading Plan Stage. (Allan E. Seward Engineering Geology, 19 September 1994, Inc., p. 45) Unstable fills are to be mitigated through removal, stabilization, or other means as	cial fill, are to be evaluated by the Newhall Ranch Specific Plan (Geotechnical Engineer at the subdivision and/or Grading Plan Stage. (Allan Engineer and engineering Geology, 19 September 1994, Inc., p. 45) Unstable Engineering	Receipt of Geotechnical Evaluation	1. 2.	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety	
	determined by the Newhall Ranch Specific Plan Geotechnical Engineer.	Coologicaly	Field Verification	3.	Prior to Approval of Final Subdivision Maps or Grading Plans, and Verify During Grading	
SP 4.1-45.	cut, or fill slopes. (Allan E. Seward Engineering Geology, Inc., 19 September	Applicant (Civil Engineer and	Include this Measure in Specifications	1.	LACDPW, Geology/Soils Section, Building and Safety	
	4, p. 20) Construction Superintendent)			2.	LACDPW, Geology/Soils Section, Building and Safety	
			Field Verification	3.	During Grading	
SP 4.1-46.	Runoff from future pads and structures is to be collected and channeled to the street and/or natural drainage courses via non-erosive drainage devices.	Applicant (Civil Engineer and Construction Superintendent)	Engineer and Construction	Include this Measure in	1.	LACDPW, Geology/Soils Section, Building and Safety
	(Allan E. Seward Engineering Geology, Inc., 19 September 1994, p. 20)			1	2.	LACDPW, Geology/Soils Section, Building and Safety
			Field Verification	3.	During Grading	
SP 4.1-47.	Water is not to stand or pond anywhere on the graded pads. (Allan E. Seward Engineering Geology, Inc., 19 September 1994, p. 20)		Include this Measure in	1.	LACDPW, Geology/Soils Section, Building and Safety	
		Construction Superintendent)	Specifications	2.	LACDPW, Geology/Soils Section, Building and Safety	
			Field Verification	3.	During Grading	

4.1 GEOT	Mitigation Measures/Conditions of Approval ECHNICAL AND SOIL RESOURCES (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase			
SP 4.1-48.	Oil and water wells that might occur on site are to be abandoned in accordance with state and local regulations. (Allan E. Seward Engineering Geology, Inc., 19 September 1994, p. 45)	Applicant (Well abandonment Specialist)	Receipt of Confirmation of Abandonment	<ol> <li>1.</li> <li>2.</li> </ol>	California Department of Conservation, Division of Oil and Gas, Building and Safety LACDPW, Geology/Soils			
				3.	Section, Building and Safety Prior to Issuance of Grading Permits			
SP 4.1-49.	operations, their locations are to be surveyed and the current well conditions evaluated immediately. (Allan E. Seward Engineering Geology,	Applicant (Civil Engineer and Well	Include Measure in Specifications	1.	California Department of Conservation, Division of Oil and Gas, Building and Safety			
		he Abandonment					2.	California Department of Conservation, Division of Oil and Gas, Building and Safety
				3.	During Grading			
SP 4.1-50.	well #31 will be evaluated at the subdivision stage. If necessary, the well will be abandoned in accordance with state and local regulations. (Allan E.	Applicant (Civil Engineer and Well	Locate Well #31 on Tract Map	1.	California Department of Conservation, Division of Oil and Gas, Building and Safety			
	Seward Engineering Geology, Inc., 13 December 1995, p. 12)	Abandonment Specialist)	Documentation of Abandonment,	2.	California Department of Conservation, Division of Oil and Gas, Building and Safety			
			if applicable	3.	Prior to Issuance of Grading Permit			
LV 4.1-1.	Prior to placing compacted fill, the ground surface shall be prepared by removing non-compacted artificial fill (af), disturbed compacted fill soils	Applicant (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety			
	(Caf), loose alluvium, and other unsuitable materials. The geotechnical engineer and/or his representatives shall observe the excavated areas prior to placing compacted fill.	Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety			
	to pateing compacted ini.			3.	During Grading			

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.1 GEOT	TECHNICAL AND SOIL RESOURCES (cont.)				
LV 4.1-2.	After the ground surface to receive fill has been exposed, it shall be ripped to a minimum depth of 6 inches, brought to optimum moisture content or above and thoroughly mixed to obtain a near uniform moisture condition and uniform blend of materials, and then compacted to 90 percent per the latest American Society for Testing and Materials (ASTM) D1557 laboratory maximum density.	Applicant (Geotechnical Engineer)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety During Grading
LV 4.1-3.	Removal depths for alluvium, older alluvium, and overlying soil/plow pan materials range from 4 to 16 feet and shall be as indicated on the approved Geologic/Geotechnical Map.	Applicant (Geotechnical Engineer)	Receipt and Review of Geologic/ Geotechnical Map	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety During Grading
			Field Verification		
LV 4.1-4.	Soil removals on the southwestern portion of the site shall be scheduled if possible during the summer or fall months, to minimize impacts to Grading from shallow groundwater. The contractor shall be prepared to implement dewatering systems, if necessary.	Applicant (Geotechnical Engineer)	Grading Plan Check	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety During Grading
LV 4.1-5.	Pico and Saugus Formation bedrock shall be over-excavated 5 feet below proposed grade to eliminate cut-fill or bedrock-alluvium transitions in building pads. Expansive materials in the bedrock shall be over excavated 8 feet in building pad areas.	Applicant (Geotechnical Engineer)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety During Grading

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase												
4.1 GEOT	ECHNICAL AND SOIL RESOURCES (cont.)	<u>-</u>			-												
LV 4.1-6.		(Geotechnical	Field Verification	1.	Section, Building and Safety												
		0 /		2.	LACDPW, Geology/Soils Section, Building and Safety												
				3.	During Grading												
LV 4.1-7.	Compacted artificial fill along the northern margin of the site shall be assessed for building suitability at the grading plan stage.		(Geotechnical	(Geotechnical	(Geotechnical	(Geotechnical	(Geotechnical	(Geotechnical	(Geotechnical	(Geotechnical	(Geotechnical	(Geotechnical	(Geotechnical	(Geotechnical \	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
				2.	LACDPW, Geology/Soils Section, Building and Safety												
				3.	Prior to Issuance of Grading Permit												
LV 4.1-8.	Concrete, asphalt concrete and other debris stockpiled on the site shall be removed, and either ground up for use as sub-base material, or reduced into	Applicant (Geotechnical Engineer)	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety												
	fragments small enough to be buried in the deeper portions of the fill.		Engineer)	Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety										
				3.	During Grading												
LV 4.1-9.	Where recommended removals encounter ground water, water levels shall be controlled by providing an adequate excavation bottom/slope and sumps	Applicant (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety												
	for pumping water out as the excavation proceeds, or ground water may be lowered by installing shallow dewatering well points prior to grading. Partial removals of soils above the water table and soil improvement below the water table may be another option. Dewatering may be needed depending on the season when the removals are performed and the actual removal depths are determined. Contractors shall use piezometric data for planning dewatering measures.	2	2.	LACDPW, Geology/Soils Section, Building and Safety													
				3.	During Grading												

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase			
4.1 GEOTECHNICAL AND SOIL RESOURCES (cont.)							
LV 4.1-10. On-site soils, except any debris or organic matter, may be used as sources for compacted fills. Rock or similar irreducible material with a maximum	Applicant (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety			
dimension greater than 8 inches shall not be placed in the fill without approval of the geotechnical engineer. Rocks or hard fragments larger than 4 inches shall not compose more than 25 percent of the fill and/or lift. Any	Engineer)	Engineer)	ı			2.	LACDPW, Geology/Soils Section, Building and Safety
large rock fragments over 8 inches in size may be incorporated into the fill as rockfill in windrows after being reduced to the specific maximum rock fill size. Where fill depths are too shallow to allow large rock disposal, special handling or removal may be required. Much of the on-site alluvium and older alluvium is coarse-grained and lacks sufficient cohesion for surficial stability in fill slopes. Selective grading of fill materials with sufficient cohesion derived from on site or imported fill shall be necessary for use in fill slopes.			3.	During Grading			
LV 4.1-11. The engineering characteristics of imported fill material shall be evaluated when the source area has been identified.	Applicant (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety			
	Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety			
			3.	During Grading			

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.1 GEOTECHNICAL AND SOIL RESOURCES (cont.)				
LV 4.1-12. Most of the slopes proposed on the site are fill slopes. Stability fills a recommended for all of the cut-slopes on the site; therefore, no cut-slop will remain after the completion of grading. All fill slopes shall be constructed on firm material where the slope receiving fill exceeds a ratio 5 to 1 horizontal to vertical (h:v). Fill slope inclination shall not be steep than 2:1 (h:v). The fill material within approximately one equipment wid (typically 15 feet) of the slope face shall be constructed with cohesis material selectively graded from on-site or import fills. Stability fills a recommended where cut-slope faces will expose fill-over-bedrock alluvium-over-bedrock conditions. These fills shall be constructed with keyway at the toe of the fill slope with a minimum equipment width but no less than 15 feet, and a minimum depth of 3 feet into the firm undisturbed earth. Following completion of the keyway excavations, backfilling with certified engineered fill shall not proceed prior to the approval of the keyway by the project engineering geologist.	es (Geotechnical De Engineer) of er th	Field Verification	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety During Grading
LV 4.1-13. Backcut slopes for Stability fills shall be no steeper than the final face of the proposed fill.	ne Applicant (Geotechnical Engineer)	Field Verification	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety During Grading
LV 4.1-14. Areas that are to receive compacted fill shall be observed by the geotechnical engineer prior to the placement of fill.	ne Applicant (Geotechnical Engineer)	Field Verification	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	
LV 4.1-15. All drainage devices shall be properly installed and observed by the geotechnical engineer and/or owner's representative(s) prior to placement of backfill.		Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety During Grading

Mitigation Measures/Conditions of Approval 4.1 GEOTECHNICAL AND SOIL RESOURCES (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.1-16. Fill soils shall consist of imported soils or on-site soils free of organics, cobbles, and deleterious material, provided each material is approved by the geotechnical engineer. The geotechnical engineer shall evaluate and/or test the import material for its conformance with the report recommendations prior to its delivery to the site. The contractor shall notify the geotechnical engineer 72 hours prior to importing material to the site.	Applicant (Geotechnical Engineer and Construction Superintendent)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety During Grading
LV 4.1-17. Fill shall be placed in controlled layers (lifts), the thickness of which is compatible with the type of compaction equipment used. The fill materials shall be brought to optimum moisture content or above, thoroughly mixed during spreading to obtain a near uniform moisture condition and uniform blend of materials, and then placed in layers with a thickness (loose) not exceeding 8 inches. Each layer shall be compacted to a minimum compaction of 90 percent relative to the maximum dry density determined per the latest ASTM D1557 test. Density testing shall be performed by the geotechnical engineer to verify relative compaction. The contractor shall provide proper access and level areas for testing.	Applicant (Geotechnical Engineer and Construction Superintendent)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety During Grading
LV 4.1-18. Rocks or rock fragments less than 8 inches in the largest dimension may be utilized in the fill, provided they are not placed in concentrated pockets. However, rocks larger than 4 inches shall not be placed within 3 feet of finish grade.	Applicant (Geotechnical Engineer)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety During Grading
LV 4.1-19. Rocks greater than 8 inches in largest dimension shall be taken off site, or placed in accordance with the recommendation of the soils engineer in areas designated as suitable for rock disposal.	Applicant (Geotechnical Engineer)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety During Grading

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.1 GEOTECHNICAL AND SOIL RESOURCES (cont.)				
LV 4.1-20. Where space limitations do not allow for conventional fill compact operations, special backfill materials, and procedures may be required.	Pea (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
	gravel or other select fill can be used in areas of limited space. A sand and Portland cement slurry (two sacks per cubic-yard mix) shall be used in limited space areas for shallow backfill near final pad grade, and pea gravel shall be placed in deeper backfill near drainage systems.		2.	LACDPW, Geology/Soils Section, Building and Safety
			3.	During Grading
LV 4.1-21. The geotechnical engineer shall observe the placement of fill and cond in-place field density tests on the compacted fill to check for adequ	ate (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
moisture content and the required relative compaction. Where less the specified relative compaction is indicated, additional compacting effort shapplied and the soil moisture conditioned as necessary until adequates and the soil moisture conditioned as necessary until adequates.	all	Engineer)	2.	LACDPW, Geology/Soils Section, Building and Safety
relative compaction is attained.			3.	During Grading
LV 4.1-22. The Contractor shall comply with the minimum relative compaction out the finish slope face of fill slopes, buttresses, and stabilization fills as	set (Construction	truction Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
forth in the specifications for compacted fill. This may be achieved by eith overbuilding the slope and cutting back as necessary, or by dir compaction of the slope face with suitable equipment, or by any other	ect		2.	LACDPW, Geology/Soils Section, Building and Safety
procedure that produces the required result.	iei		3.	During Grading
LV 4.1-23. Any abandoned underground structures, such as cesspools, cisterns, mini shafts, tunnels, septic tanks, wells, pipelines or other structures	not (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
discovered prior to grading shall be removed or treated to the satisfaction the soils engineer and/or the controlling agency for the project.	of Engineer)	Engineer)	2.	LACDPW, Geology/Soils Section, Building and Safety
			3.	During Grading
LV 4.1-24. The Contractor shall have suitable and sufficient equipment during particular operation to handle the volume of fill being placed. When the suitable are sufficient equipment during particular operation to handle the volume of fill being placed.	en (Construction	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
necessary, fill placement equipment shall be shut down temporarily order to permit proper compaction of fills, correction of deficient areas, or facilitate required field testing.	-	ent)	2.	LACDPW, Geology/Soils Section, Building and Safety
facilitate required field testing.			3.	During Grading

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.1 GEOTECHNICAL AND SOIL RESOURCES (cont.)				-
LV 4.1-25. The Contractor shall be responsible for the satisfactory completion of al earthwork in accordance with the project plans and specifications.	(Construction	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
	Superintendent)		2.	LACDPW, Geology/Soils Section, Building and Safety
			3.	During Grading
LV 4.1-26. Trench excavations to receive backfill shall be free of trash, debris or other unsatisfactory materials prior to backfill placement, and shall be observed	l (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
by the geotechnical engineer.	by the geotechnical engineer.  Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety
			3.	During Grading
LV 4.1-27. Except as stipulated herein, soils obtained from the trench excavation may be used as backfill if they are essentially free of organics and deleterious	Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
materials.	Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety
			3.	During Grading
LV 4.1-28. Rocks generated from the trench excavation not exceeding 3 inches in largest dimension may be used as backfill material. However, such materia	l (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
shall not be placed within 12 inches of the top of the pipeline. No more than 30 percent of the backfill volume shall contain particles larger than 1 inch in		Engineer) 2.	2.	LACDPW, Geology/Soils Section, Building and Safety
diameter, and rocks shall be well mixed with finer soil.			3.	During Grading
LV 4.1-29. Soils (other than aggregates) with a Sand Equivalent (SE) greater than or equal to 30, as determined by ASTM D 2419 Standard Test Method or at the	e (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
discretion of the engineer or representative in the field, may be used for bedding and shading material in the pipe zone areas. These soils are			2.	LACDPW, Geology/Soils Section, Building and Safety
considered satisfactory for compaction by jetting procedures.			3.	During Grading

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase	
4.1 GEOTECHNICAL AND SOIL RESOURCES (cont.)					
LV 4.1-30. No jetting shall occur in utility trenches within the top 2 feet of the subgra of concrete slabs-on-grade.	(Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety	
	Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety	
			3.	During Grading	
	mechanical methods such as tamping sheepsfoot, vibrating or pneumatic (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety	
rollers, or other mechanical tampers to achieve the density specified here.  The backfill materials shall be brought to optimum moisture content above, thoroughly mixed during spreading to obtain a near uniform.	or		2.	LACDPW, Geology/Soils Section, Building and Safety	
moisture condition and uniform blend of materials, and then placed horizontal layers with a thickness (loose) not exceeding 8 inches. Tree backfills shall be compacted to a minimum compaction of 90 percentative to the maximum dry density determined per the latest ASTM D1 test.	in nch ent		3.	During Grading	
LV 4.1-32. The contractor shall select the equipment and process to be used to achieve the specified density within a trench without damage to the pipeline,	* *	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety	
adjacent ground, existing improvements, or completed work.	Superintendent)	uperintendent) 2	2.	LACDPW, Geology/Soils Section, Building and Safety	
			3.	During Grading	
LV 4.1-33. Observations and field tests shall be carried on during construction by geotechnical engineer to confirm that the required degree of compact	ion (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety	
within a trench has been obtained. Where compaction within a trench is than that specified, additional compaction effort shall be made we adjustment of the moisture content as presessary until the credit	rith	Engineer)	2.	LACDPW, Geology/Soils Section, Building and Safety	
adjustment of the moisture content as necessary until the specificompaction is obtained. Field density tests may be omitted at the discret of the engineer or his representative in the field.			3.	During Grading	

Mitigation Measures/Conditions of Approval 4.1 GEOTECHNICAL AND SOIL RESOURCES (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.1-34. Whenever, in the opinion of the geotechnical engineer, an unstable condition is being created within a trench, either by cutting or filling, the work shall not proceed until an investigation has been made and the excavation plan revised, if deemed necessary.	e (Geotechnical	Field Verification	1. 2.	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety
LV 4.1-35. Fill material within a trench shall not be placed, spread, or rolled during unfavorable weather conditions. When the work is interrupted by heavy rain, fill operations shall not be resumed until field tests by the geotechnic	y (Geotechnical	Field Verification	<ul><li>3.</li><li>1.</li><li>2.</li></ul>	During Grading  LACDPW, Geology/Soils  Section, Building and Safety  LACDPW, Geology/Soils
engineer indicate the moisture content and density of the fill are specified.  LV 4.1-36. Water shall never be allowed to stand or pond on building pads, nor shou	as	Include this	<ol> <li>3.</li> <li>1.</li> </ol>	Section, Building and Safety During Grading LACDPW, Geology/Soils
it be allowed to run over constructed slopes, but is to be conducted to the driveways or natural waterways via non-erodible drainage devices. addition, it is recommended that all drainage devices be inspected periodically and be kept clear of all debris. Drainage and erosion contributions in the second periodically and be kept clear of all debris.	Engineer and Construction d Superintendent)	Measure in Specifications	2.	Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety
shall be in accordance with the standards set forth in Sections 7018 and 701 of the 1997 Los Angeles County Uniform Building Code.		Field Verification	3.	During Grading
LV 4.1-37. Modification of the existing pad grades after approval of Fine Grading to the project supervising civil engineer can adversely affect the drainage	of Engineer and	Include this Measure in	1.	LACDPW, Geology/Soils Section, Building and Safety
the lots. Lot drainage shall not be modified by future landscapin construction of pools, spas, walkways, garden walls, etc., unless addition remedial measures (area drains, additional grading, etc.) are in compliant	al Superintendent)	Specifications	2.	LACDPW, Geology/Soils Section, Building and Safety
with Los Angeles County Codes.		Field Verification	3.	After Approval of Fine Grading Plan
LV 4.1-38. Positive surface drainage shall be maintained away from buildings. The recommended drainage patterns shall be established at the time of Find Creating Roof drainage shall be sallested in gratters and decommended with a sallested in gratters and decommended with the sallested with th	e Engineer and	Include this  Measure in	1.	LACDPW, Geology/Soils Section, Building and Safety
Grading. Roof drainage shall be collected in gutters and downspouts, which terminate at approved discharge points.	h Construction Superintendent)	1	2.	LACDPW, Geology/Soils Section, Building and Safety
		Field Verification	3.	During Grading

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.1 GEOTECHNICAL AND SOIL RESOURCES (cont.)				
LV 4.1-39. Permanent erosion control measures shall be initiated immediately following completion of grading.	Applicant (Civil Engineer and Construction Superintendent)	Field Verification	<ol> <li>2.</li> </ol>	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety
			3.	Immediately Following Completion of Grading
LV 4.1-40. All interceptor ditches, drainage terraces, down-drains and any other drainage devices shall be maintained and kept clear of debris. A qualified		Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
			2.	LACDPW, Geology/Soils Section, Building and Safety
			3.	Immediately Following Completion of Grading
LV 4.1-41. Retaining walls shall have adequate freeboard to provide a catchment area for minor slope erosion. Periodic inspection, and if necessary, cleanout of	Applicant (Civil Engineer and Construction Superintendent)	Engineer and Verification Construction	1.	LACDPW, Geology/Soils Section, Building and Safety
deposited soil and debris shall be performed, particularly during and after periods of rainfall.			2.	LACDPW, Geology/Soils Section, Building and Safety
			3.	Immediately Following Completion of Grading
LV 4.1-42. The future developers shall be made aware of the potential problems, which may develop when drainage is altered through landscaping and/or	Applicant (Civil Engineer and	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
construction of retaining walls, and paved walkways. Ponded water, water directed over slope faces, leaking irrigation systems, over-watering or other conditions that could lead to excessive soil moisture, shall be avoided.	Construction Superintendent)		2.	LACDPW, Geology/Soils Section, Building and Safety
conditions that could lead to excessive soil moisture, shall be avoided.			3.	Immediately Following Completion of Grading

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.1 GEOTECHNICAL AND SOIL RESOURCES (cont.)				
LV 4.1-43. Slope surficial soils may be subject to water-induced mass erosion.  Therefore, a suitable proportion of slope planting shall have root systems,	• •	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
trees for this purpose shall be considered. Intervening areas can then be	which will develop well below 3 feet. Drought-resistant shrubs and low trees for this purpose shall be considered. Intervening areas can then be planted with lightweight surface plants with shallower root systems. All plants shall be lightweight and require low moisture. Any loose slough generated during the process of planting shall be properly removed from the slope face(s).		2.	LACDPW, Geology/Soils Section, Building and Safety
plants shall be lightweight and require low moisture. Any loose slough			3.	Prior to Issuance of Occupancy Permits
LV 4.1-44. Short-term, non-plant erosion control measures shall be implemented during construction delays, adverse climate/weather conditions, and when	Applicant (Civil Engineer and	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
plant growth rates do not permit rapid vegetation of graded areas. Examples of short-term, non-plant erosion control measures include	Construction Superintendent)		2.	LACDPW, Geology/Soils Section, Building and Safety
matting, netting, plastic sheets, deep (5 feet) staking, etc.			3.	During Delays in All Construction Phases
LV 4.1-45. All possible precautions shall be taken to maintain a moderate and uniform soil moisture to avoid high and/or fluctuating water content in slope	Applicant (Landscape	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
materials. Slope irrigation systems shall be properly operated and maintained and system controls shall be placed under strict control.	Architect)		2.	LACDPW, Geology/Soils Section, Building and Safety
			3.	Prior to Issuance of Occupancy Permits
LV 4.1-46. A program of aggressive rodent control shall be implemented to control burrowing on slope areas.	Applicant (Civil Engineer and	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
	Construction Superintendent)		2.	LACDPW, Geology/Soils Section, Building and Safety
			3.	During All Construction Phases

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase	
4.1 GEOTECHNICAL AND SOIL RESOURCES (cont.)	_			-	
LV 4.1-47. Bank protection is proposed to consist of a soil cement, gunite or rip-rap liner, which is buried/concealed behind a 4:1 (h:v) fill slope. Construction of	Applicant (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety	
the liner will involve the excavation of a 20-foot-deep slot as shown in the details on the tentative map. Where the toe of the 4:1 slope extends beyond the removals for the slot, the alluvium shall be overexcavated 3 feet prior to	Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety	
placement of overlying fill.	<u>.</u>		3.	During Slope Protection Activities	
LV 4.1-48. Ground water will likely be encountered between a depth of 5 and 10 feet; therefore dewatering shall be undertaken to complete the lower 10 to 15 feet		Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety	
of the proposed slot excavation.			2.	LACDPW, Geology/Soils Section, Building and Safety	
			3.	During Slope Protection Activities	
LV 4.1-49. All final grades shall be sloped away from the building foundations to allow rapid removal of surface water runoff. No ponding of water shall be	Applicant (Civil Engineer,	** '	1.	LACDPW, Geology/Soils Section, Building and Safety	
allowed adjacent to the foundations. Plants and other landscape vegetation requiring excessive watering shall be avoided adjacent to the building	Construction Superintendent		2.	LACDPW, Geology/Soils Section, Building and Safety	
barrier shall be provided to prevent water from affecting the building foundations.				3.	During Fine Grading and Landscape Installation
LV 4.1-50. Future structures shall be designed according to standards applicable to Seismic Zone 4 of the Uniform Building Code.	Applicant	Building Plan Check	1.	LACDPW, Geology/Soils Section, Building and Safety	
			2.	LACDPW, Geology/Soils Section, Building and Safety	
			3.	Prior to Issuance of Building Permits	

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.1 GEOTECHNICAL AND SOIL RESOURCES (cont.)				
LV 4.1-51. Lots underlain by transitions between different material types (e.g., bedrock to fill, bedrock to alluvium, etc.) shall be over-excavated 5 feet to minimize	1.1	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
potential adverse impacts associated with differential materials response. Er	Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety
			3.	During Grading
LV 4.1-52. Over-excavation of clay-rich bedding planes of the Saugus Formation or Pico Formation and subsequent placement of a certified fill cap is	Applicant (Geotechnical Engineer)	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
recommended to mitigate potential hazards from expansive material, and to reduce potential hazards from potential secondary seismogenic movement			2.	LACDPW, Geology/Soils Section, Building and Safety
along bedding planes.			3.	During Grading
LV 4.1-53. Stability Fills shall be analyzed at the grading plan stage based on testing of the actual materials proposed for the fill.	Applicant (Geotechnical	Grading Plan Check	1.	LACDPW, Geology/Soils Section, Building and Safety
	Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety
			3.	Prior to Issuance of Grading Permit
LV 4.1-54. Most of the alluvium and older Alluvium on the site are coarse-grained and have low cohesion. These materials shall not be used within the outer 4 feet	(Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
of fill slopes and Stability Fills.	Engineer)	Engineer)	2.	LACDPW, Geology/Soils Section, Building and Safety
			3.	During Grading

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.1 GEOT	ECHNICAL AND SOIL RESOURCES (cont.)				
LV 4.1-55.	Excavations deeper than 3 feet shall conform to safety requirements for excavations as set forth in the State Construction Safety Orders enforced by the State Division of Industrial Safety, California occupational Safety and Health Administration (CAL OSHA). Temporary excavations no higher than 12 feet shall be no steeper than 1:1 (h:v). For excavations to 20 feet in height, the bottom 3.5 feet may be vertical and the upper portion between 3.5 and 20 feet shall be no steeper than 1.5:1 (h:v). Excavations not complying with these requirements shall be shored. It is strongly recommended that excavation walls in sands and dry soils be kept moist, but not saturated at all times.	Applicant (Geotechnical Engineer)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety During Grading
LV 4.1-56.	Parameters for design of cantilever and braced shoring shall be provided at the grading plan stage.	Applicant (Geotechnical Engineer)	Grading Plan Check or Field Verification as Applicable	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety Prior to Issuance of Grading Permit or During Grading Activities
LV 4.1-57.	The bases of excavations or trenches shall be firm and unyielding prior to foundations or utility construction. On-site materials other than topsoil or soils with roots or deleterious materials may be used for backfilling excavations. Densification (compaction) by jetting may be used for on-site clean sands or imported equivalent of coarser sand provided they have a Sand Equivalent greater than or equal to 30 as determined by ASTM D2419 test method. Recommended specifications for placement of trench backfill are presented in Appendix C of the September 27, 2000 geologic and geotechnical report.	Applicant (Geotechnical Engineer)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Geology/Soils Section, Building and Safety LACDPW, Geology/Soils Section, Building and Safety During Grading

41 CEOTI	Mitigation Measures/Conditions of Approval ECHNICAL AND SOIL RESOURCES (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase	
4.1 GEOTI	echnical and soil resources (cont.)					
LV 4.1-58.	The structural design shall include seismic geotechnical parameters in accordance with Uniform Building Code (UBC) requirements for Seismic	Applicant	Building Plan Check	1.	LACDPW, Geology/Soils Section, Building and Safety	
	Zone 4. These parameters shall be provided at the grading plan stage.			2.	LACDPW, Geology/Soils Section, Building and Safety	
				3.	Prior to Issuance of Grading Permit	
LV 4.1-59.	Shallow spread footings for foundation support of up to three-story residential, commercial or light industrial developments can adequately be	Applicant	Grading Plan Check and	1.	LACDPW, Geology/Soils Section, Building and Safety	
	derived from non-organic native soils, processed as necessary, and bedrock or engineered fill compacted as previously recommended. The composition of footings for heavier structures, if applicable, shall be addressed at the grading plan stage. Tentatively, an allowable bearing capacity of 2,500 pounds per square foot can be used for shallow foundations constructed in certified compacted fill originated from existing, near-surface soils (except vegetative soils). Lateral resistance of footing walls shall be provided at the grading plan stage.	Check, as	Building Plan Check, as Applicable	2.	LACDPW, Geology/Soils Section, Building and Safety	
				Applicable	3.	Prior to Issuance of Grading and or Building Permits
LV 4.1-60.	Figure C4 (Appendix C), "Cut Lot (Transitional)" and "Cut-Fill Lot (Transitional") of the September 27, 2000 geologic and geotechnical report	chnical report (Geotechnical Verification indations will Engineer)  Engineer)			1.	LACDPW, Geology/Soils Section, Building and Safety
	provides a foundation grading detail for locations where foundations will straddle transition zones between cut and fill materials. If the remaining			2.	LACDPW, Geology/Soils Section, Building and Safety	
	cut-fill transition is steep at depth below the building area, the geometry of the transition shall be reviewed during grading operations by the soils engineer on a site-specific basis to evaluate the need for additional over-excavation removals and/or additional foundation reinforcement. Based on this review, appropriate action shall be taken as deemed necessary by the engineer. As a general guideline, steep cut/fill transitions would include slope gradients steeper than 4:1 (h:v) and overall variations in fill thickness of greater than 15 feet, which occur within 20 feet of final pad grade. Transitions between differing material types, such as bedrock and alluvium, also shall be overexcavated 5 feet as recommended in Section 1.2 of Appendix E of the September 27, 2000, Geologic and Geotechnical Report.			3.	During Grading	

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.1 GEOT	ECHNICAL AND SOIL RESOURCES (cont.)				
LV 4.1-61.	To minimize significant settlements, upper soils in areas to receive fills shall be removed and recompacted to competent materials. Specific foundation design loads shall be provided at the grading plan stage.	Applicant (Geotechnical Engineer)	Grading Plan Check		LACDPW, Geology/Soils Section, Building and Safety
	design loads shall be provided at the grading plan stage.	Field Sec Verification 3. Prior	LACDPW, Geology/Soils Section, Building and Safety		
				3.	Prior to Issuance of Grading Permit and During Grading
LV 4.1-62.	Whenever seepage of groundwater is observed, the condition shall be evaluated by the engineering geologist and geotechnical engineer prior to	Applicant (Engineering	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
	covering with fill material.	Geologist and Geotechnical Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety
				3.	During Grading
LV 4.1-63.	Surface drainage control design shall include provisions for positive surface gradients to ensure that surface runoff is not permitted to pond, particularly	Applicant (Civil Engineer and	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
	above slopes or adjacent to building foundations or slabs. Surface runoff shall be directed away from slopes and foundations and collected in lined ditches or drainage swales, via non-erodible drainage devices, which is to discharge to paved roadways, or existing watercourses. If these facilities discharge onto natural ground, means shall be provided to control erosion and to create sheet flow.	Construction Superintendent)		2.	LACDPW, Geology/Soils Section, Building and Safety
				3.	Prior to Issuance of Occupancy Permit
LV 4.1-64.	Fill slopes and stability fills, as applicable, shall be provided with subsurface drainage as necessary for stability.	Applicant (Geotechnical	Field Verification	1.	LACDPW, Geology/Soils Section, Building and Safety
	2.2.2.2.2.2.2.2.2.2.3.3.4.2.2.2.2.2.2.2.	Engineer)	, carrendon	2.	LACDPW, Geology/Soils Section, Building and Safety
				3.	During Grading

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.1 GEOTI	ECHNICAL AND SOIL RESOURCES (cont.)				
LV 4.1-65.	Additional testing for expansive soils shall be performed at the grading plan stage and during finish grading so that appropriate foundation design	Applicant (Geotechnical	Grading Plan Check	1.	LACDPW, Geology/Soils Section, Building and Safety
	recommendations for expansive soils, if applicable, can be made.	Field Section, Building and Verification 3. Prior to Issuance of G Permit and During Grant Internet of Geotechnical Results Section, Building and Section,	LACDPW, Geology/Soils Section, Building and Safety		
			3.	Prior to Issuance of Grading Permit and During Grading	
LV 4.1-66.	Testing for soil corrosivity shall be undertaken at additional locations within the project site at the grading plan stage. Final recommendations for	(Geotechnical	-	1.	LACDPW, Geology/Soils Section, Building and Safety
	concrete shall be in accordance with the latest UBC requirements, and a corrosion specialist shall provide mitigating recommendations for potential corrosion of metals.			2.	LACDPW, Geology/Soils Section, Building and Safety
				3.	Prior to Issuance of Grading Permit
LV 4.1-67.	Preliminary retaining wall geotechnical design parameters and pavement design(s) shall be provided at the grading plan stage.	Applicant Grading Plan (Geotechnical Check Engineer)	_	1.	LACDPW, Geology/Soils Section, Building and Safety
			2.	LACDPW, Geology/Soils Section, Building and Safety	
				3.	Prior to Issuance of Grading Permit
LV 4.1-68.	If the proposed fills over alluvium and slopewash at either the Adobe Canyon or Chiquito Canyon sites are to be considered "structural fill,"	Applicant (Geotechnical	Grading Plan Check	1.	LACDPW, Geology/Soils Section, Building and Safety
	subsurface studies shall be performed to determine actual liquefaction potential of these soils. If this potential exists, it shall be addressed by	Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety
	removal and recompaction of the alluvium above groundwater, in order to provide a cap to bridge effects.			3.	Prior to Issuance of Grading Permit

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.1 GEOT	ECHNICAL AND SOIL RESOURCES (cont.)				
LV 4.1-69.	. Where possible, removals that impact the mapped landslides shall be completed so as to not remove the existing landslide stability. If this is not possible, the conditions shall be geotechnically evaluated on a case-by-case	Applicant (Geotechnical Engineer)	Grading Plan Check		LACDPW, Geology/Soils Section, Building and Safety
	basis at the Grading Plan stage in order to safely complete the necessary removals.	8 7		2.	LACDPW, Geology/Soils Section, Building and Safety
		slope Applicant Grading Plan	3.	Prior to Issuance of Grading Permit	
LV 4.1-70.	along the base of the existing Edison tower within the Chiquito Canyon	Applicant (Geotechnical	Grading Plan Check	1.	LACDPW, Geology/Soils Section, Building and Safety
	grading site. Corrective measures, such as construction of a buttress or stability fills, shall be implemented if the proposed cut slope does not comply with the required minimum factor of safety.	Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety
				3.	Prior to Issuance of Grading Permit
LV 4.1-71.	If future development is proposed within either Adobe Canyon or Chiquito Canyon, subsurface exploration and analyses shall be conducted to	Applicant (Geotechnical Engineer)	Grading Plan Check	1.	LACDPW, Geology/Soils Section, Building and Safety
	determine landslide stability. Means to mitigate the potential effects of landslides, including complete or partial removal, buttressing, avoidance, or building setbacks shall be identified at that time.			2.	LACDPW, Geology/Soils Section, Building and Safety
				3.	Prior to Issuance of Grading Permit
LV 4.1-72.	If future development is proposed within Chiquito Canyon, slope stability analysis shall be performed for the 186-foot-high cut slope along the base of	Applicant (Geotechnical	Grading Plan Check	1.	LACDPW, Geology/Soils Section, Building and Safety
	the existing Edison tower within the Chiquito Canyon grading site. Corrective measures, such as construction of a buttress or stability fills, shall	Engineer)		2.	LACDPW, Geology/Soils Section, Building and Safety
	be implemented if the proposed cut slope does not comply with the required minimum factor of safety.			3.	Prior to Issuance of Grading Permit

4.2 HYDR	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
(MMP) fo	er to <b>Section 4.3, Water Quality</b> , of this Mitigation Monitoring Program r a listing of Program Environmental Impact Report (EIR) mitigation measures to hydrology.				
LV 4.2-1.	The on-site storm drains (pipes and reinforced concrete boxes) and open channels shall be designed and constructed for either the 25-year or 50-year	Applicant (Civil Engineer)	Approval of Drainage Plans	1.	LACDPW, Flood Control District (FCD)
	capital storm.			2.	LACDPW, FCD
			Field Verification	3.	Prior to Issuance of Occupancy Permit(s)
LV 4.2-2.	Debris basins shall be constructed pursuant to LACDPW requirements to	Applicant (Civil	Approval of	1.	LACDPW, FCD
	intercept flows from undeveloped areas entering into the developed	Applicant (Civil Engineer)  Approval of Drainage Plans  Field Verification  Approval of Drainage Plans  Applicant (Civil Engineer)  Approval of Drainage Plans  Field Verification  Approval of Occupancy Permit(s)  Approval of Drainage Plans  Approval of Drainage Plans  Field Verification  Approval of Occupancy Permit(s)  Approval of Drainage Plans  Applicant (Civil Verification  Approval of Drainage Plans  Approval of Occupancy Permit(s)  Approval of Drainage Plans  Approval of Drainage Plans			
	portions of the site.			3.	
LV 4.2-3.	Energy dissipaters consisting of either rip-rap or larger standard impact-	Applicant (Civil	Approval of	1.	LACDPW, FCD
	type energy dissipaters shall be installed as required by LACDPW at outlet	Engineer)	Drainage Plans	2.	LACDPW, FCD
	tions to reduce velocities of runoff into the channel where necessary to rent erosion.		Field Verification	3.	Prior to Issuance of Occupancy Permit(s)

4.2 HYDR	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.2-4.	The project is required to comply with the Regional Water Quality Control Board (RWQCB) Municipal Permit (General MS4 Permit) Order No.R4-2006-0074, National Pollutant Discharge Elimination System (NPDES) No. CAS004001 (amended September 14, 2006), and with the state's General Construction Activity Storm Water Permit, California State Water Resources Control Board Order No. 99-08-DWQ, National Pollutant Discharge Elimination System (NPDES) No. CAS000002, reissued on August 19, 1999, as amended and further modified by Resolution No. 2001-046 on April 26, 2001. (Since release of the Draft EIR, this permit has been reissued. This mitigation has been revised to reflect the most current permit dates).	Applicant (Construction Superintendent)	Submittal of Urban Storm Water management Plan (USWMP) and Storm Water Pollution Prevention Plan (SWPPP) to Regional Water Quality Control Board for the Los Angeles Region (RWQCBLAR)	1. 2. 3.	RWQCBLAR  LACDPW, Building and Safety  Prior to Grading and During Grading Operations
			Field Verification		

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.2 HYDRO	LOGY (cont.)				<u> </u>
LV 4.2-5. I	During all construction phases, temporary erosion control shall be implemented to retain soil and sediment on the tract map site, within the Adobe Canyon borrow site, the Chiquito Canyon grading site, the utility corridor right-of-way, and the bank stabilization areas, as follows:  Re-vegetate exposed areas as quickly as possible;  Minimize disturbed areas;  Divert runoff from downstream drainages with earth dikes, temporary drains, slope drains, etc.;  Reduce velocity through outlet protection, check dams, and slope roughening/terracing;  Implement dust control measures, such as sand fences, watering, etc.;  Stabilize all disturbed areas with blankets, reinforced channel liners, soil cement, fiber matrices, geotextiles, and/or other erosion resistant soil coverings or treatments;  Stabilize construction entrances/exits with aggregate underdrain with filter cloth or other comparable method;  Place sediment control BMPs at appropriate locations along the site perimeter and at all operational internal inlets to the storm drain system at all times during the rainy season (sediment control BMPs may include filtration devices and barriers, such as fiber rolls, silt fence, straw bale barriers, and gravel inlet filters, and/or with settling devices, such as sediment traps or basins); and/or  Eliminate or reduce, to the extent feasible, non-stormwater discharges (e.g., pipe flushing, and fire hydrant flushing, over-watering during dust control, vehicle and equipment wash down) from the construction site through the use of appropriate sediment control BMPs.  All necessary permits, agreements, letters of exemption from the Army Corps of Engineers (ACOE) and/or the California Department of Fish and Game (CDFG) for project-related development within their respective	Applicant (Construction Superintendent)  Applicant	Field Verification  Receipt of Necessary Documents	1. 2. 3.	LACDPW, FCD LACDPW, FCD During All Construction Phases  Los Angeles County Department of Regional Planning (LACDRP)
j	jurisdictions must be obtained prior to the issuance of grading permits.			<ul><li>2.</li><li>3.</li></ul>	LACDRP Prior to Issuance of Grading Permits

4.2 HYDR	Mitigation Measures/Conditions of Approval OLOGY (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.2-7.	By October 1st of each year, a separate erosion control plan for construction activities shall be submitted to the local municipality describing the erosion control measures that will be implemented during the rainy season (October 1 through April 15).	Applicant (Construction Superintendent)	Receipt and Review of Annual Erosion Control Plan	1. 2. 3.	LACDPW, FCD  LACDPW, FCD  By October 1 of Each Year  During Construction  Activities
LV 4.2-8.	A final developed condition hydrology analysis shall be prepared in conjunction with final project design when precise engineering occurs. This final analysis shall confirm that the final project design is consistent with this analysis. This final developed condition hydrology analysis shall confirm that the sizing and design of the water quality and hydrologic control. BMPs control hydromodification impacts in accordance with the NSRP Sub-Regional Stormwater Mitigation Plan. Those final calculations shall establish design features for the project that satisfy the criterion that post-development peak stormwater runoff discharge rates, velocities, and duration in natural drainage systems mimic pre-development conditions. All elements of the storm drain system shall conform to the policies and standards of the LACDPW, Flood Control Division, as applicable.	Applicant (Project Hydrologist)	Receipt and Review of Final Hydrology Analysis	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW, FCD LACDPW, FCD Prior to Approval of Final Design Plans
LV 4.2-9.	Ultimate project hydrology and debris production calculations shall be prepared by a project engineer to verify the requirements for debris basins and/or desilting inlets.	Applicant (Civil Engineer)	Review of Calculations	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW, FCD LACDPW, FCD Prior to Approval of Final Design Plans
.V 4.2-10.	To reduce debris being discharged from the site, debris basins shall be designed and constructed pursuant to LACDPW Flood Control to intercept flows from undeveloped areas entering into the developed portions of the site.	Applicant (Civil Engineer)	Approval of Drainage Plans Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, FCD LACDPW, FCD Prior to Issuance of Occupancy Permit(s)

40344	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.3 WATE	ER QUALITY				
SP 4.2-1.	All on- and off-site flood control improvements necessary to serve the Newhall Ranch Specific Plan are to be constructed to the satisfaction of the County of Los Angeles Department of Public Works Flood Control Division.	Applicant (Civil Engineer)	Approval of Drainage Plans Field Verification	1. 2. 3.	LACDPW, FCD LACDPW, FCD Prior to Issuance of Occupancy Permit(s)
SP 4.2-2.	All necessary permits or letters of exemption from the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, California Department of Fish and Game, and the Regional Water Quality Control Board for Specific Planrelated development are to be obtained prior to construction of drainage improvements. The performance criteria to be used in conjunction with 1603 agreements and/or 404 permits are described in Section 4.6, Biological Resources, Mitigation Measures 4.6-1 through 4.6-10 (restoration) and 4.6-11 through 4.6-16 (enhancement).	Applicant	Receipt of all Necessary Permit(s)	<ol> <li>2.</li> <li>3.</li> </ol>	ACOE, US Fish and Wildlife Service (USFWS), CDFG, RWQCBLAR ACOE, USFWS, CDFG, RWQCBLAR Prior to Grading
SP 4.2-3.	All necessary streambed agreement(s) are to be obtained from the California Department of Fish and Game wherever grading activities alter the flow of streams under CDFG jurisdiction. The performance criteria to be used in conjunction with 1603 agreements and/or 404 permits are described in Section 4.6, Biological Resources, Mitigation Measures 4.6-1 through 4.6-10 (restoration) and 4.6-11 through 4.6-16 (enhancement).	Applicant	Receipt of Streambed Agreements	1. 2. 3.	CDFG LACDPW, FCD Prior to Grading
SP 4.2-4.	Conditional Letters of Map Revision (CLOMR) relative to adjustments to the 100-year Federal Insurance Administration (FIA) flood plain are to be obtained by the applicant after the proposed drainage facilities are constructed.	Applicant (Civil Engineer)	Receipt of CLOMR(s)	<ol> <li>2.</li> <li>3.</li> </ol>	Federal Insurance Administration LACDPW Upon Completion of Facilities
SP 4.2-5.	Prior to the approval and recordation of each subdivision map, a Hydrology Plan, Drainage Plan, and Grading Plan (including an Erosion Control Plan if required) for each subdivision must be prepared by the applicant of the subdivision map to ensure that no significant erosion, sedimentation, or flooding impacts would occur during or after site development. These plans shall be prepared to the satisfaction of the County of Los Angeles Department of Public Works.	Applicant (Project Engineer)	Approval of Final Hydrology Plan, Final Drainage Plan, and Final Grading Plan	<ol> <li>2.</li> <li>3.</li> </ol>	Geology/Soils Section LACDPW, FCD and Geology/Soils Section

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.3 WATI	ER QUALITY (cont.)	<u> </u>			<u> </u>
SP 4.2-6.	Install permanent erosion control measures, such as desilting and debris basins, drainage swales, slope drains, storm drain inlet/outlet protection, and sediment traps in order to prevent sediment and debris from the upper reaches of the drainage areas which occur on the Newhall Ranch site from entering storm drainage improvements. These erosion control measures shall be installed to the satisfaction of the County of Los Angeles Department of Public Works.	Applicant (Project Engineer)	Field Verification	1. 2. 3.	LACDPW, FCD LACDPW, FCD Prior to Issuance of Occupancy Permits
SP 4.2-7.	The applicant for any subdivision map permitting construction shall satisfy all applicable requirements of the NPDES Program in effect in Los Angeles County to the satisfaction of the County of Los Angeles Department of Public Works. These requirements currently include preparation of an USWMP containing design features and Best Management Practices (BMPs) appropriate and applicable to the subdivision. In addition, the requirements currently include preparation of a Storm Water Management Pollution Prevention Plan (SWPPP) containing design features and BMPs appropriate and applicable to the subdivision. The County of Los Angeles Department of Public Works shall monitor compliance with those NPDES requirements.	Applicant (Construction Superintendent)	Submittal of USWMP and SWPPP to RWQCBLAR Field Verification	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	RWQCBLAR  LACDPW, Building and Safety  Prior to Grading and During Grading Operations
LV 4.3-1.	Prior to issuance of a building permit, and as a part of the design level hydrology study and facilities plan, the project applicant shall submit to LACDPW for review and approval of drainage plans showing the incorporation into the project of those water quality and hydrologic control project design features (i.e., the post-development water quality and hydrologic control BMPs)(the "PDFs"), identified in this <b>Section 4.3</b> , which PDFs shall be designed to meet the standards set forth in this <b>Section 4.3</b> , including the sizing, capacity, and volume reduction performance standards set forth herein, all as summarized in <b>Table 4.3-17</b> .	Applicant	Review of Drainage Plans	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Issuance of Building Permits

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.3 WATE	R QUALITY (cont.)				
LV 4.3-2.	Prior to issuance of a building permit, and as a part of the design level hydrology study and facilities plan, the project applicant shall submit to planning staff for review a Landscape and Integrated Pest Management Plan, identified in this <b>Section 4.3</b> , which shall be designed to meet the standards set forth as follows.  A Landscape and Integrated Pest Management Plan shall be developed and implemented for common area landscaping within the Landmark Village	Applicant	Review of Landscape and Integrated Pest Management Plan	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP  LACDRP  Prior to Issuance of Building  Permits

Plan will address the following components:

1. Pest identification.

- 2. Practices to prevent pest incidence and reduce pest buildup.
- 3. Monitoring to examine vegetation and surrounding areas for pests to evaluate trends and to identify when controls are needed.

Project that addresses integrated pest management (IPM) and pesticide and fertilizer application guidelines. IPM is a strategy that focuses on long-term prevention or suppression of pest problems (i.e., insects, diseases and weeds) through a combination of techniques including: using pest-resistant plants; biological controls; cultural practices; habitat modification; and the judicious use of pesticides according to treatment thresholds, when monitoring indicates pesticides are needed because pest populations exceed established thresholds. The Landscape and Integrated Pest Management

- 4. Establishment of action thresholds that trigger control actions.
- 5. Pest control methods cultural, mechanical, environmental, biological, and appropriate pesticides.
- 6. Pesticide management safety (e.g., Material Safety Data Sheets, precautionary statements, protective equipment); regulatory requirements; spill mitigation; groundwater and surface water protection measures associated with pesticide use; and pesticide applicator certifications, licenses, and training (i.e., all pesticide applicators must be certified by the California Department of Pesticide Regulation).
- 7. Fertilizer management soil assessment, fertilizer types, application methods, and storage and handling.

4.4 BIOT A	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.6-1.	The restoration mitigation areas located within the River Corridor Special Management Area (SMA) shall be in areas that have been disturbed by previous uses or activities. Mitigation shall be conducted only on sites where soils, hydrology, and microclimate conditions are suitable for riparian habitat. First priority will be given to those restorable areas that occur adjacent to existing patches (areas) of native habitat that support sensitive species, particularly endangered or threatened species. The goal is to increase habitat patch size and connectivity with other existing habitat patches while restoring habitat values that will benefit sensitive species. (This measure is implemented primarily through LV4.4-1 and the development of a Comprehensive Mitigation Implementation Plan (CMIP) for the Newhall Ranch Specific Plan, of which the Landmark Village project is the first subdivision. Mitigation measure LV 4.4-29 provides the replacement ratios for vegetation restoration and measure LV4.4-30 designates the location priorities for revegetation efforts.)	Applicant (Project Biologist)	Field Verification	1. 2. 3.	ACOE, CDFG ACOE, CDFG Prior to Approval of Revegetation Plans
SP 4.6-2.	A qualified biologist shall prepare or review revegetation plans. The biologist shall also monitor the restoration effort from its inception through the establishment phase. (This measure will be implemented through the applicant contracting with a biological consulting company acceptable to the County to prepare the revegetation plans for the Landmark Village project.)	Applicant (Project Biologist)	Revegetation Plan Comments and Documentation of Restoration Monitoring from Qualified Biologist  Field Verification	1. 2. 3.	ACOE, CDFG ACOE, CDFG Prior to Approval of Revegetation Plans and Monitor During Restoration Effort

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOT.	A (cont.)				
SP 4.6-3.	Revegetation Plans may be prepared as part of a California Department of Fish and Game 1603 Streambed Alteration Agreement and/or an U.S. Army Corps of Engineers Section 404 Permit, and shall include:  • Input from both the Project proponent and resource agencies to assure that the Project objectives applicable to the River Corridor SMA and the criteria of this RMP are met; and	Applicant (Project Biologist)	Revegetation Plan Review	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	ACOE, CDFG ACOE, CDFG Prior to Approval of Revegetation Plan
	• The identification of restoration/mitigation sites to be used. This effort shall involve an analysis of the suitability of potential sites to support the desired habitat, including a description of the existing conditions at the site(s) and such base line data information deemed necessary by the permitting agency. (This measure will be implemented for the Landmark Village project through compliance with the master 1602 Streambed Alteration Agreement and the Section 404 Permit processed by the Newhall Ranch Company associated with the 2009 EIS/EIR.)				
SP 4.6-4.	The revegetation effort shall involve an analysis of the site conditions such as soils and hydrology so that site preparation needs can be evaluated. The revegetation plan shall include the details and procedures required to prepare the restoration site for planting (i.e., grading, soil preparation, soil stockpiling, soil amendments, etc.), including the need for a supplemental irrigation system, if any. (This measure will be implemented through the detailed revegetation plan requirements provided within the Landmark Village mitigation measure LV4.4-1.)	Applicant (Project Biologist)	Revegetation Plan Review	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	ACOE, CDFG ACOE, CDFG Prior to Approval of Revegetation Plan
SP 4.6-5.	Restoration of riparian habitats within the River Corridor SMA shall use plant species native to the Santa Clara River. Cuttings or seeds of native plants shall be gathered within the River Corridor SMA or purchased from nurseries with local supplies to provide good genetic stock for the replacement habitats. Plant species used in the restoration of riparian habitat shall be listed on the approved project plant palette (Specific Plan Table 2.6-1, Recommended Plant Species for Habitat Restoration in the River Corridor SMA) or as approved by the permitting state and federal agencies. ( <i>This measure will be implemented through the CMIP of measure LV4.4-1 for the Landmark Village project.</i> )	Applicant (Project Biologist)	Revegetation Plan Review Field Verification	1. 2. 3.	ACOE, CDFG ACOE, CDFG Prior to Approval of Revegetation Plan and Monitor During Restoration Effort

4.4 BIOTA	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.6-6.	The final revegetation plans shall include notes that outline the methods and procedures for the installation of the plant materials. Plant protection measures identified by the project biologist shall be incorporated into the planting design/layout. (This measure will be implemented through the CMIP of measure LV 4.4-1 and measure LV 4.4-32 for the Landmark Village project.)	Applicant (Project Biologist)	Revegetation Plan Review	1. 2. 3.	ACOE, CDFG ACOE, CDFG Prior to Approval of Revegetation Plan
SP 4.6-7.	The revegetation plan shall include guidelines for the maintenance of the mitigation site during the establishment phase of the plantings. The maintenance program shall contain guidelines for the control of non-native plant species, the maintenance of the irrigation system, and the replacement of plant species. (This measure will be implemented through compliance with the measures LV4.4-34 and LV4.4-37 for the Landmark Village project.)	Applicant (Project Biologist)	Revegetation Plan Review	<ol> <li>2.</li> <li>3.</li> </ol>	ACOE, CDFG ACOE, CDFG Prior to Approval of Revegetation Plan
P 4.6-8.	The revegetation plan shall provide for monitoring to evaluate the growth of the developing habitat. Specific performance goals for the restored habitat shall be defined by qualitative and quantitative characteristics of similar habitats on the river (e.g., density, cover, species composition, structural development). The monitoring effort shall include an evaluation of not only the plant material installed, but the use of the site by wildlife. The length of the monitoring period shall be determined by the permitting state and/or federal agency. ( <i>This measure will be implemented through measures LV4.4-31 and LV4.4-34 for the Landmark Village project.</i> )	Applicant (Project Biologist)	Revegetation Plan Review	<ol> <li>2.</li> <li>3.</li> </ol>	ACOE, CDFG ACOE, CDFG Prior to Approval of Revegetation Plan
P 4.6-9.	Monitoring reports for the mitigation site shall be reviewed by the permitting state and/or federal agency. (This measure will be implemented through the measures LV4.4-40 and LV4.4-41 for the Landmark Village project.)	Applicant (Project Biologist)	Review of Monitoring Reports	<ol> <li>2.</li> <li>3.</li> </ol>	ACOE and CDFG ACOE and CDFG During Revegetation Activities
P 4.6-10.	Contingency plans and appropriate remedial measures shall also be outlined in the revegetation plan. ( <i>This measure will be implemented through measures LV4.4-33 and LV 4.4-34 for the Landmark Village project.</i> )	Applicant (Project Biologist)	Revegetation Plan Review	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	ACOE, CDFG ACOE, CDFG Prior to Approval of Revegetation Plan

4.4 BIOTA	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.6-11.	Habitat enhancement as referred to in this document means the rehabilitation of areas of native habitat that have been moderately disturbed by past activities (e.g., grazing, roads, oil and natural gas operations, etc.) or have been invaded by non-native plant species such as giant cane ( <i>Arundo donax</i> ) and tamarisk ( <i>Tamarix</i> sp.). ( <i>This measure will be implemented through measures LV4.4-36 and LV 4.4-37 for the Landmark Village project.</i> )	Applicant (Project Biologist)	Revegetation Plan Review	1. 2. 3.	ACOE, CDFG ACOE, CDFG Prior to Approval of Revegetation Plan
SP 4.6-12.	Removal of grazing is an important means of enhancement of habitat values. Without ongoing disturbance from cattle, many riparian areas will recover naturally. Grazing except as permitted as a long-term resource management activity will be removed from the River Corridor SMA pursuant to the Long-Term Management Plan set forth in Section 4.6 of the Specific Plan EIR. (This measure will be implemented in accordance with the conditions of approval for the Landmark Village project.)	Land Owner/SMA Manager	Mitigation Monitoring Reports	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP  LACDRP  Mitigation Monitoring  Reports under Conditional  Use Permit (CUP) Condition  No. 8
SP 4.6-13.	To provide guidelines for the installation of supplemental plantings of native species within enhancement areas, a revegetation plan shall be prepared prior to implementation of mitigation (see guidelines for revegetation plans above). These supplemental plantings will be composed of plant species similar to those growing in the existing habitat patch (see Specific Plan Table 2.6-1). (This measure will be implemented through measures LV4.4-1 and LV 4.4-34 for the Landmark Village project.)	Applicant (Project Biologist)	Revegetation Plan Review	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	ACOE, CDFG ACOE, CDFG Prior to Approval of Revegetation Plan
SP 4.6-14.	Not all enhancement areas will necessarily require supplemental plantings of native species. Some areas may support conditions conducive for rapid "natural" re-establishment of native species. The revegetation plan may incorporate means of enhancement to areas of compacted soils, poor soil fertility, trash or flood debris, and roads as a way of enhancing riparian habitat values. (This measure will be implemented through the CMIP of measure LV4.4-1 for the Landmark Village project.)	Applicant (Project Biologist)	Revegetation Plan Review	1. 2. 3.	ACOE, CDFG ACOE, CDFG Prior to Approval of Revegetation Plan

4.4 BIOTA	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
	<ul> <li>Removal of non-native species such as giant cane (<i>Arundo donax</i>), salt cedar or tamarisk (<i>Tamarix</i> sp.), tree tobacco (<i>Nicotiana glauca</i>), castor bean (<i>Ricinus communis</i>), if included in a revegetation plan to mitigate impacts, shall be subject to the following standards:</li> <li>First priority shall be given to those habitat patches that support or have a high potential for supporting sensitive species, particularly endangered or threatened species;</li> <li>All non-native species removals shall be conducted according to a resource agency approved exotics removal program; and</li> </ul>	Applicant (Project Biologist)	Revegetation Plan Review	1. 2. 3.	ACOE, CDFG ACOE, CDFG Prior to Approval of Revegetation Plan
	<ul> <li>Removal of non-native species in patches of native habitat shall be conducted in such a way as to minimize impacts to the existing native riparian plant species. (This measure will be implemented through measures LV4.4-36 and LV 4.4-37 for the Landmark Village project.)</li> </ul>				
SP 4.6-16.	Mitigation banking activities for riparian habitats will be subject to state and federal regulations and permits. Mitigation banking for oak resources shall be conducted pursuant to the Oak Resources Replacement Program. Mitigation banking for elderberry scrub shall be subject to approval of plans by the County Forester. ( <i>This measure is implemented through mitigation measure LV 4.4-1 and the development of a CMIP.</i> )	l Biologist) Federal . Permits; s Submittal of	Federal Permits; Submittal of	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	ACOE, CDFG, ACOE, CDFG, Prior to Approval of Mitigation Banking Program
			Oak Resources; Review of Oak Tree Permit	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP LACDRP Approval of Oak Tree Permit
			Elderberry Scrub; Review of Initial Study	1. 2. 3.	LACDRP LACDRP Prior to Grading

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA	A (cont.)				
SP 4.6-17.	Access to the River Corridor SMA for hiking and biking shall be limited to the river trail system (including the Regional River Trail and various Local Trails) as set forth in this Specific Plan.	Applicant (Design)	Trails Plans, Tract Maps, and/or Site Plans (Design)		LA County Department of Parks and Recreation LA County Department of
	• The River trail system shall be designed to avoid impacts to existing native riparian habitat, especially habitat areas known to support sensitive species. Where impacts to riparian habitat are unavoidable, disturbance shall be minimized and mitigated as outlined above under Mitigation Measures 4.6-1 through 4.6-8.			3.	Parks and Recreation Prior to Approval of Trails Plans, Tract Maps, and/or Site Plans, as applicable.
	<ul> <li>Access to the River Corridor SMA will be limited to daytime use of the designated trail system.</li> <li>Signs indicating that no pets of any kind will be allowed within the River Corridor SMA, with the exception that equestrian use is permitted on established trails, shall be posted along the River Corridor SMA.</li> <li>No hunting, fishing, or motor or off-trail bike riding shall be permitted.</li> <li>The trail system shall be designed and constructed to minimize impacts</li> </ul>	SMA Manager (Access)	Field Verification (Access)	1. 2. 3.	LACDRP LACDRP Upon Complaint
SP 4.6-18.	on native habitats.  Where development lies adjacent to the boundary of the River Corridor SMA a transition area shall be designed to lessen the impact of the development on the conserved area. Transition areas may be comprised of Open Area, natural or revegetated manufactured slopes, other planted areas, bank areas, and trails. Exhibits 2.6-4, 2.6-5, and 2.6-6 indicate the relationship between the River Corridor SMA and the development (disturbed) areas of the Specific Plan. The SMAs and the Open Area as well as the undisturbed portions of the development areas are shown in green. As indicated on the exhibits, on the south side of the River Corridor SMA is separated from development by the river bluffs, except in one location. The Regional River Trail will serve as transition area on the north side of the river where development areas adjoin the River Corridor SMA (excluding Travel Village).	Applicant	Review of Trails Plans, Tract Maps, and/or Site Plans	1. 2. 3.	LACDRP

8.0-40

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA (cont.)				
<ul> <li>SP 4.6-19. The following are the standards for design of transition areas:</li> <li>In all locations where there is no steep grade separation between River Corridor and development, a trail shall be provided along edge;</li> <li>Native riparian plants shall be incorporated into the landscapin transition areas between the River Corridor SMA and a development areas where feasible for their long-term survival used in these areas shall be those listed on the approved plant (Specific Plan Table 2.6-2 of the Resource Managemer [Recommended Plants for Transition Areas Adjacent to the Corridor SMA]);</li> <li>Roads and bridges that cross the River Corridor SMA shat adequate barriers at their perimeters to discourage access to the Corridor SMA adjacent to the structures;</li> <li>Where bank stabilization is required to protect development shall be composed of ungrouted rock, or buried bank stabilized described in subsection 2.5.2.a., except at bridge crossings and locations where public health and safety requirements neconcrete or other bank protection; and</li> </ul>	ong this  ag of the adjacent Plants t palette at Plan e River  all have areas, it ation as d other	Review of Trails Plans, Tract Maps, and/or Site Plans	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP and LACDPW fo Bank Stabilization LACDRP and LACDPW fo Bank Stabilization Prior to Approval of Trails Plans, Tract Maps, and/or Site Plans, as applicable

8.0-41

4.4 BIOTA	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.6-19.	(cont.)				
	• A minimum 100-foot-wide buffer adjacent to the Santa Clara River should be required between the top river side of bank stabilization and development within the Land Use Designations Residential Low Medium, Residential Medium, Mixed-Use and Business Park unless, through Planning Director review in consultation with the staff biologist, it is determined that a lesser buffer would adequately protect the riparian resources within the River Corridor or that a 100-foot-wide buffer is infeasible for physical infrastructure planning. The buffer area may be used for public infrastructure, such as flood control access; sewer, water, and utility easements; abutments; trails and parks, subject to findings of consistency with the Specific Plan and applicable County policies. (This measure is implemented through the Los Angeles County Department of Parks and Recreation review of the project design during the Subdivision Committee review process and conditions of approval.)				
SP 4.6-20.	The following guidelines shall be followed during any grading activities that take place within the River Corridor SMA:	Applicant (Project Biologist)	Field Verification	1. 2.	LACDPW LACDPW
	• Grading perimeters shall be clearly marked and inspected by the project biologist prior to grading occurring within or immediately adjacent to the River Corridor SMA.			3.	Prior to and During Grading Activities
	• The project biologist shall work with the grading contractor to avoid inadvertent impacts to riparian resources.				
	(This measure will be implemented through measures LV4.4-8 through LV4.4-26.)				
SP 4.6-21.	1 11	Los Angeles	None Required	1.	Los Angeles County
	Management Area designation for the River Corridor SMA shall become effective. The permitted uses and development standards for the SMA are	County		2.	Los Angeles County
	governed by the Development Regulations, Chapter 3 of the Specific Plan. (This measure was implemented with the approval of the Newhall Ranch Specific Plan. The Landmark Village project was designed in compliance with the development standards of the Special management Areas and the Significant Ecological Areas compatibility criteria.			3.	Upon Effective Date of Zoning Ordinance

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOT	A (cont.)				
SP 4.6-22.	Upon completion of development of all land uses, utilities, roads, flood control improvements, bridges, trails, and other improvements necessary for implementation of the Specific Plan within the River Corridor in each subdivision allowing construction within or adjacent to the River Corridor, a permanent, non-revocable <i>conservation and public access easement</i> shall be offered to the County of Los Angeles pursuant to Mitigation Measure 4.6-23 below over the portion of the River Corridor SMA within that subdivision. ( <i>This measure is implemented in accordance with the conditions of</i>	Land Owner	Offer of Dedication of Easement	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Department of Regional Planning LA County Department of Regional Planning Submittal of Monitoring Report(s) Under CUP Condition No. 8
SP 4.6-23.	approval for the Landmark Village project.) The River Corridor SMA Conservation and Public Access Easement shall be offered to the County of Los Angeles prior to the transfer of the River Corridor SMA ownership, or portion thereof to the management entity described in Mitigation Measure 4.6-26 below. (This measure is implemented in accordance with the conditions of approval for the Landmark Village project.)	Land Owner	Offer of Dedication of Easement	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Department of Regional Planning LA County Department of Regional Planning Prior to Transfer of River Corridor Ownership Under 4.6-26
SP 4.6-24.	The River Corridor SMA Conservation and Public Access Easement shall prohibit grazing, except as a long-term resource management activity, and agriculture within the River Corridor and shall restrict recreation use to the established trail system.  Agricultural land uses and grazing for purposes other than long-term resource management activities within the River Corridor shall be extended in the event of the filing of any legal action against Los Angeles County challenging final approval of the Newhall Ranch Specific Plan and any related project approvals or certification of the Final EIR for Newhall Ranch. Agricultural land uses and grazing for purposes other than long-term resource management activities within the River Corridor shall be extended by the time period between the filing of any such legal action and the entry of a final judgment by a court with appropriate jurisdiction, after exhausting all rights of appeal, or execution of a final settlement agreement between all parties to the legal action, whichever occurs first. (This measure is implemented in accordance with the conditions of approval for the Landmark Village project.)	Land Owner	Review of Easement Document	1. 2. 3.	LACDRP LACDRP Prior to Acceptance of Easement by County

4.4 BIOTA	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.6-25.	The River Corridor SMA conservation and public access easement shall be consistent in its provisions with any other conservation easements to state or federal resource agencies which may have been granted as part of mitigation or mitigation banking activities. ( <i>This measure is implemented in accordance with the conditions of approval for the Landmark Village project.</i> )	Land Owner	Review of Conservation Easement /and Resource Permits	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Department of Regional Planning LA County Department of Regional Planning Prior to Recordation of River Corridor SMA Conservation Easement
SP 4.6-26.	Prior to the recordation of the River Corridor SMA <i>Conservation and Public Access Easement</i> as specified in Mitigation Measure 4.6-23 above, the land owner shall provide a plan to the County for the permanent ownership and management of the River Corridor SMA, including any necessary financing. This plan shall include the transfer of ownership of the River Corridor SMA to the Center for Natural Lands Management, or if the Center for Natural Lands Management is declared bankrupt or dissolved, ownership will transfer or revert to a <i>joint powers authority</i> consisting of Los Angeles County (4 members), the City of Santa Clarita (2 members), and the Santa Monica Mountains Conservancy (2 members). ( <i>This measure is implemented in accordance with the conditions of approval for the Landmark Village project.</i> )	Land Owner	Approval of Management Plan by County	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Department of Regional Planning LA County Department of Regional Planning Prior to Recordation of River Corridor SMA Conservation Easement
SP 4.6-26a	<ul> <li>Two types of habitat restoration may occur in the High Country SMA: <ol> <li>riparian revegetation activities principally in Salt Creek Canyon and</li> <li>oak tree replacement in, or adjacent to, existing oak woodlands and savannahs.</li> <li>Mitigation requirements for riparian revegetation activities within the High Country SMA are the same as those for the River Corridor SMA and are set forth in Mitigation Measures 4.6-1 through 4.6-11 and 4.6-13 through 4.6-16 above.</li> <li>Mitigation requirements for oak tree replacement are set forth in Mitigation Measure 4.6-48 below.</li> </ol> </li> <li>(This measure is implemented through mitigation measure LV4.4-1 and the development of a CMIP.)</li> </ul>	Land Owner (Project Biologist)	Field Verification	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	ACOE, CDFG (Riparian) ACOE, CDFG (Riparian) Approval of Revegetation Plans

4.4 BIOT A	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.6-27.	Removal of grazing from the High Country SMA except for those grazing activities associated with long-term resource management programs, is a principal means of enhancing habitat values in the creeks, brushland and woodland areas of the SMA. The removal of grazing in the High Country SMA is discussed below under (b) 4. Long Term Management. All enhancement activities for riparian habitat within the High Country SMA shall be governed by the same provisions as set forth for enhancement in the River Corridor SMA. Specific Plan Table 2.6-3 of the Resource Management Plan provides a list of appropriate plant species for use in enhancement areas in the High Country SMA. (This measure is implemented in accordance with the conditions of approval for the Landmark Village project and the Newhall Ranch Specific Plan.)	Land Owner/Center for Natural land Management (CNLM)	Enhancement Plans and Field Verification	1. 2. 3.	LACDRP CNLM During Enhancement Activities
SP 4.6-28.	Mitigation banking activities for riparian habitats will be subject to state and federal regulations and permits. Mitigation banking for oak resources, shall be conducted pursuant to the Oak Resource Replacement Program. Mitigation banking for elderberry scrub shall be subject to approval of plans by the County Forester. ( <i>This measure is implemented through mitigation measure LV4.4-1 and the development of a CMIP.</i> )	Applicant (Project Biologist)	State and Federal Permits; Submittal of Permits	1. 2. 3.	ACOE, CDFG ACOE, CDFG Prior to Approval of Mitigation Banking Program
			Oak Resources; Review of Oak Tree Permit	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP  LACDRP  Approval of Oak Tree Permit
			Elderberry Scrub; Review of Initial Study	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP LACDRP Prior to Grading
SP 4.6-34.	Grading perimeters shall be clearly marked and inspected by the project biologist prior to impacts occurring within or adjacent to the High Country SMA. (This measure will be implemented through measures LV4.4-8 through LV4.4-26.)	Applicant (Project Biologist)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior To and During Grading

4.4 BIOTA	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 DIO I A	a (cont.)				
SP 4.6-35.	The project biologist shall work with the grading contractor to avoid inadvertent impacts to biological resources outside of the grading area. ( <i>This measure will be implemented through measure LV4.4-18.</i> )	Applicant (Project Biologist)	Field Verification	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW During Grading
SP 4.6-36.	Upon final approval of the Newhall Ranch Specific Plan, the Special Management Area designation for the High Country SMA shall become effective. The permitted uses and development standards for the SMA are governed by the Development Regulations, Chapter 3. (This measure was implemented with the approval of the Newhall Ranch Specific Plan. The Landmark Village project was designed in compliance with the development standards of the Special management Areas and the Significant Ecological Areas compatibility criteria)	Land Owner	Review of Development Plans	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Department of Regional Planning
SP 4.6-37.	<ol> <li>The High Country SMA shall be offered for dedication in three approximately equal phases of approximately 1,400 acres each proceeding from north to south, as follows:</li> <li>The first offer of dedication will take place with the issuance of the 2,000<sup>th</sup> residential building permit of Newhall Ranch;</li> <li>The second offer of dedication will take place with the issuance of the 6,000<sup>th</sup> residential building permit of Newhall Ranch;</li> <li>The remaining offer of dedication will be completed by the 11,000<sup>th</sup> residential building permit of Newhall Ranch; and</li> <li>The Specific Plan applicant shall provide a quarterly report to the Departments of Public Works and Regional Planning which indicates the number of residential building permits issued in the Specific Plan area by subdivision map number. (<i>This measure is implemented in accordance with the conditions of approval for the Landmark Village project and the provision of the Newhall Ranch Specific Plan.</i>)</li> </ol>	Land Owner	Offer of Dedication	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Department of Regional Planning LA County Department of Building and Safety Upon Issuance of Building Permits

4.4 BIOT A	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.6-38.	Prior to dedication of the High Country SMA, a conservation and public access easement shall be offered to the County of Los Angeles and a conservation and management easement offered to the Center for Natural Lands Management. The High Country SMA Conservation and Public Access Easement shall be consistent in its provisions with any other conservation easements to state or federal resource agencies which may have been granted as part of mitigation or mitigation banking activities. (This measure is implemented in accordance with the conditions of approval for the Landmark Village project and the provision of the Newhall Ranch Specific Plan.)	Land Owner	Review of Easement Document	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Department of Regional Planning LA County Department of Building and Safety Upon Issuance of Building Permits
SP 4.6-39.	The High Country SMA conservation and public access easement shall prohibit grazing within the High Country, except for those grazing activities associated with the long-term resource management programs, and shall restrict recreation to the established trail system. (This measure is implemented in accordance with the conditions of approval for the Landmark Village project and the provision of the Newhall Ranch Specific Plan.)	Land Owner	Review of Easement Document	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP  LACDRP  Prior to Acceptance of  Easement by Los Angeles  County
SP 4.6-40.	The High Country SMA conservation and public access easement shall be consistent in its provisions with any other conservation easements to state or federal resource agencies which may have been granted as part of mitigation or mitigation banking activities. (This measure is implemented in accordance with the conditions of approval for the Landmark Village project and the provision of the Newhall Ranch Specific Plan.)	Land Owner	Review of Conservation Easement and Resource Permits	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Department of Regional Planning LA County Department of Regional Planning Prior to Recordation of High Country SMA Conservation Easement
SP 4.6-41.	The High Country SMA shall be offered for dedication in fee to a <i>joint powers authority</i> consisting of Los Angeles County (4 members), the City of Santa Clarita (2 members), and the Santa Monica Mountains Conservancy (2 members). The <i>joint powers authority</i> will have overall responsibility for recreation within and conservation of the High Country. ( <i>This measure is implemented in accordance with the conditions of approval for the Landmark Village project and the provision of the Newhall Ranch Specific Plan.)</i>	Land Owner	Offer of Dedication	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Department of Regional Planning LA County Department of Regional Planning

4.4 BIOTA	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase		
1,121011	(cont.)						
SP 4.6-42.	An appropriate type of service or assessment district shall be formed under the authority of the Los Angeles County Board of Supervisors for the collection of up to \$24 per single family detached dwelling unit per year and	Land Owner	Approval of Assessment		LA County Department of Regional Planning		
	\$15 per single family attached dwelling unit per year, excluding any units designated as Low and Very Low affordable housing units pursuant to		District Report by County	2.	LA County Department of Regional Planning		
	Section 3.10, Affordable Housing Program of the Specific Plan. This revenue would be assessed to the homeowner beginning with the occupancy of each dwelling unit and distributed to the <i>joint powers authority</i> for the purposes of recreation, maintenance, construction, conservation and related activities within the <i>High Country Special Management Area</i> . (This measure is implemented in accordance with the conditions of approval for the Landmark Village project and the provision of the Newhall Ranch Specific Plan.)			3.	Prior to Issuance of First Residential Occupancy Permit		
SP 4.6-43.	Suitable portions of <i>Open Area</i> may be used for mitigation of riparian, <i>oak resources</i> , or elderberry scrub. Mitigation activities within <i>Open Area</i> shall be subject to the following requirements, as applicable:	Manager of Open Area	Review of Mitigation Plans/Field		ACOE; CDFG or Los Angeles County as applicable		
	<ul> <li>River Corridor SMA Mitigation Requirements, including: Mitigation Measures 4.6-1 through 4.6-11 and 4.6-13 through 4.6-16; and</li> </ul>		Verification		Verification	2.	ACOE; CDFG or Los Angeles County as applicable
	<ul> <li>High Country SMA Mitigation Requirements, including: Mitigation Measures 4.6-27, 4.6-29 through 4.6-42; and</li> </ul>			3.	During Mitigation		
	• Mitigation Banking – Mitigation Measure 4.6-16.						
	(This measure is implemented in accordance with the conditions of approval for the Landmark Village project and the provision of the Newhall Ranch Specific Plan.)						
SP 4.6-46.	While Open Area is generally intended to remain in a natural state, some grading may take place, especially for parks, major drainages, trails, and	Land Owner	Review of Mitigation	1.	LA County Department of Regional Planning		
	roadways. Trails are also planned to be within Open Area. (This measure is implemented through the Los Angeles County Subdivision Committee review process and conditions of graphents).		Plans/Field Verification	2.	LA County Department of Regional Planning		
	process and conditions of approval.)	maitions of approval.)		3.	Prior to Issuance of Building Permits		

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase		
4.4 BIOTA	(cont.)						
SP 4.6-47.	At the time that final subdivision maps permitting construction are recorded, the Open Area within the map will be offered for dedication to	Land Owner	Review of Conservation	1.	LA County Department of Regional Planning		
	the Center for Natural Lands Management. Community Parks within Open Area are intended to be public parks. Prior to the offer of dedication of Open Area to the Center for Natural Lands Management all processary.		Easement	2.	Center for Natural Lands Management		
	Open Area to the Center for Natural Lands Management, all necessary conservation and public access easements, as well as easements for infrastructure shall be offered to the County. (This measure is implemented in accordance with the conditions of approval for the Landmark Village project and the provision of the Newhall Ranch Specific Plan.)		3.	Prior to Recordation of Maps Permitting Construction			
SP 4.6-47a.	Mitigation Banking will be permitted within the River Corridor SMA, the	. ,	State and	1.	ACOE, CDFG		
	High Country SMA, and the <i>Open Area land use designations</i> , subject to the following requirements:	Biologist)	Federal Permits;	2.	ACOE, CDFG		
	Mitigation banking activities for riparian habitats will be subject to state and federal regulations, and shall be conducted pursuant to the mitigation requirements set forth in Mitigation Measure 4.6-1 through		Submittal of Permits	Submittal of		3.	Prior to Approval of Mitigation Banking Program
	4.6-15 above;		Oak Resources;	1.	LACDRP		
	• Mitigation banking for oak resources shall be conducted pursuant to 4.6-48 below; and		Review of Oak	2.	LACDRP		
	<ul> <li>Mitigation banking for elderberry scrub shall be subject to approval of</li> </ul>		Tree Permit	3.	Approval of Oak Tree Permit		
	plans by the County Forester.		Elderberry	1.	LACDRP		
	(This measure is implemented in accordance with the conditions of approval for the		Scrub; Review of Initial Study	1. 2.	LACDRP		
	Landmark Village project and the provision of the Newhall Ranch Specific Plan. No elderberry scrub would be impacted by the Landmark Village project)			3.	Prior to Grading		

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase		
4.4 BIOTA			11001011		1120111011119 1 11100		
SP 4.6-48.	Standards for the restoration and enhancement of oak resources within the High Country SMA and the Open Area include the following (oak resources include oak trees of the sizes regulated under the County Oak Tree Ordinance, southern California black walnut trees, Mainland cherry trees, and Mainland cherry shrubs):	Applicant (Project Biologist)	Oak Tree Permit(s)	1. 2. 3.	LA County Forester LA County Forester Prior to Final Subdivision Map Recordation		
	<ul> <li>To mitigate the impacts to oak resources which may be removed as development occurs in the Specific Plan Area, replacement trees shall be planted in conformance with the oak tree ordinance in effect at that time;</li> </ul>						
	• Oak resource species obtained from the local gene pool shall be used in restoration or enhancement;						
	<ul> <li>Prior to recordation of construction-level final subdivision maps, an oak resource replacement plan shall be prepared that provides the guidelines for the oak tree planting and/or replanting. The Plan shall be reviewed by the Los Angeles Department of Regional Planning and the County Forester and shall include the following: site selection and preparation, selection of proper species including sizes and planting densities, protection from herbivores, site maintenance, performance standards, remedial actions, and a monitoring program; and</li> </ul>						
	• All plans and specifications shall follow County oak tree guidelines, as specified in the County Oak Tree Ordinance.						
	(This measure will be implemented through Landmark Village mitigation measures LV4.4-6, LV4.4-7, and LV4.4-53.)						
P 4.6-49.		Applicant	Review of Wildfire Fuel Modification Plan	1. 2. 3.	LA County Forester  LA County Forester  Prior to Recordation of Fir Subdivision Maps		
npact Science	es. Inc. 8.0-50				Landmark Village Recirculated Draf		

4.4 BIOT A	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.6-50.	The wildfire fuel modification plan shall depict a fuel modification zone the size of which shall be consistent with the County fuel modification ordinance requirements. Within the zone, tree pruning, removal of dead plant material and weed and grass cutting shall take place as required by the fuel modification ordinance. (This measure is implemented through the Los Angeles County Fire Department review of the project design during the Subdivision Committee review process and conditions of approval, including fuel modification plan approval.)	Applicant (Project Biologist)	Review of Wildfire Fuel Modification Plan	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Forester
SP 4.6-51.	In order to enhance the habitat value of plant communities which require fuel modification, fire retardant plant species containing habitat value may be planted within the fuel modification zone. Typical plant species suitable for Fuel Modification Zones are indicated in Specific Plan Table 2. 6-5 of the Resource Management Plan. Fuel modification zones adjacent to SMAs and Open Areas containing habitat of high value such as oak woodland and savannas shall utilize a more restrictive plant list which shall be reviewed by the County Forester. (This measure is implemented through the Los Angeles County Fire Department and Department of Regional Planning review of the project design during the Subdivision Committee review process and conditions of approval, including fuel modification plan approval.)	Applicant (Project Biologist)	Review of Wildfire Fuel Modification Plan	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Forester  LA County Forester  Prior to Recordation of Final Subdivision Maps
SP 4.6-52.	The wildfire fuel modification plan shall include the following construction period requirements: (a) a fire watch during welding operations; (b) spark arresters on all equipment or vehicles operating in a high fire hazard area; (c) designated smoking and non-smoking areas; and (d) water availability pursuant to the County Fire Department requirements. (This measure is implemented through the Los Angeles County Fire Department review of the project design during the Subdivision Committee review process and conditions of approval, including fuel modification plan approval.)	Applicant (Project Biologist)	Review of Wildfire Fuel Modification Plan	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Forester  LA County Forester  Prior to Recordation of Final Subdivision Maps

				8	.0 Mitigation Monitoring P
	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA	A (cont.)				
SP 4.6-53.	If, at the time any subdivision map proposing construction is submitted, the County determines through an Initial Study, or otherwise, that there may be rare, threatened or endangered, plant or animal species on the property to be subdivided, then, in addition to the prior surveys conducted on the Specific Plan site to define the presence or absence of sensitive habitat and associated species, current, updated site-specific surveys for all such animal or plant species shall be conducted in accordance with the consultation requirements set forth in Mitigation Measure 4.6-59 within those areas of the Specific Plan where such animal or plant species occur or are likely to occur.	Applicant (Project Biologist)	Review of Initial Study	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP LACDRP Prior to Approval of Subdivision Maps
	The site-specific surveys shall include the unarmored three-spine stickleback, the arroyo toad, the Southwestern pond turtle, the California red-legged frog, the southwestern willow flycatcher, the least Bell's vireo, the San Fernando Valley spineflower and any other rare, sensitive.				

stickleback, the arroyo toad, the Southwestern pond turtle, the California red-legged frog, the southwestern willow flycatcher, the least Bell's vireo, the San Fernando Valley spineflower and any other rare, sensitive, threatened, or endangered plant or animal species occurring, or likely to occur, on the property to be subdivided. All site-specific surveys shall be conducted during appropriate seasons by qualified botanists or qualified wildlife biologists in a manner that will locate any rare, sensitive, threatened, or endangered animal or plant species that may be present. To the extent there are applicable protocols published by either the United States Fish and Wildlife Service or the California Department of Fish and Game, all such protocols shall be followed in preparing the updated site-specific surveys.

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

SP 4.6-53. (cont.)

All site-specific survey work shall be documented in a separate report containing at least the following information: (a) project description, including a detailed map of the project location and study area; (b) a description of the biological setting, including references to the nomenclature used and updated vegetation mapping; (c) detailed description of survey methodologies; (d) dates of field surveys and total person-hours spent on the field surveys; (e) results of field surveys, including detailed maps and location data; (f) an assessment of potential impacts; (g) discussion of the significance of the rare, threatened or endangered animal or plant populations found in the project area, with consideration given to nearby populations and species distribution; (h) mitigation measures, including avoiding impacts altogether, minimizing or reducing impacts, rectifying or reducing impacts through habitat restoration, replacement or enhancement, or compensating for impacts by replacing or providing substitute resources or environments, consistent with California Environmental Quality Act (CEQA) Guidelines §15370); (i) references cited and persons contacted; and (j) other pertinent information, which is designed to disclose impacts and mitigate for such impacts. (This measure is implemented through the Landmark Village mitigation measures LV4.4-3, LV4.4-5, LV4.4-8, LV4.4-9, LV4.4-16, LV4.4-17, LV4.4-19, LV4.4-20, LV4.4-22, LV4.4-23, LV4.4-24, LV4.4-25, LV4.4-52, and LV4.4-55.)

SP 4.6-54. Prior to development within or disturbance to occupied Unarmored Applicant (Project threespine stickleback habitat, a formal consultation with the USFWS shall occur. (This measure was implemented through the Section 7 Consultation under the Federal Endangered Species and the issuance of the USFWS Biological Opinion during the processing of the 404 Permit by the USACE.)

Section 7 Biologist) Consultation

**USFWS** 2. **USFWS** 

3. Prior to Grading

440000	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase						
4.4 BIOTA	A (cont.)										
SP 4.6-55.	Prior to development or disturbance within wetlands or other sensitive	Applicant (Project	Receipt of	1.	ACOE, CDFG						
	habitats, permits shall be obtained from pertinent federal and state agencies	Biologist)	Appropriate Permit	2.	ACOE, CDFG						
	and the Specific Plan shall conform with the specific provisions of said permits. Performance criteria shall include that described in Mitigation Measures 4.6-1 through 4.6-16 and 4.6-42 through 4.6-47 for wetlands, and Mitigation Measures 4.6-27, 4.6-28, and 4.6-42 through 4.6-48 for other sensitive habitats. (This measure was implemented through the issuance to the applicant CDFG 2081 Incidental Take Permit and the issuance of the 404 Permit by the USACE, incorporating the USFWS Biological Opinion.)		applications	3.	Prior to Grading						
SP 4.6-56.	All lighting along the perimeter of natural areas shall be downcast	Applicant	<b>Building Permit</b>	1.	LACDRP						
	luminaries with light patterns directed away from natural areas (This		Plot Plan	2.	LACDRP						
	measure is implemented through the Los Angeles County Department of Regional Planning review of the project design during the Subdivision Committee review process and conditions of approval.)		Review	3.	Prior to Issuance of Building Permits						
SP 4.6-57.	Where bridge construction is proposed and water flow would be diverted,		Field	1.	ACOE, CDFG						
	blocking nets and seines shall be used to control and remove fish from the	Biologist)	Verification	2.	ACOE, CDFG						
	area of activity. All fish captured during this operation would be stored in tubs and returned unharmed back to the river after construction activities were complete. (This measure is implemented through the Landmark Village mitigation measures LV4.4-10 through LV4.4-14, and LV4.4-54.)									3.	Prior to Construction
SP 4.6-58.	To limit impacts to water quality the Specific Plan shall conform with all	Project Engineer	Approval of a Storm Water Management Plan (SWMP	1.	LACDPW						
	provisions of required NPDES permits and water quality permits that would be required by the California Regional Water Quality Control Board.			2.	LACDPW						
	(This measure is implemented through the Landmark Village mitigation measures LV4.4-14 and the issuance of and compliance with the 401 Certificate by the Regional Water Quality Control Board.)			•	3.	Prior to Issuance of Grading Permit(s)					

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
.4 BIOTA	A (cont.)				
SP 4.6-59.	Consultation shall occur with the County of Los Angeles (County) and California Department of Fish and Game (CDFG) at each of the following milestones:	Applicant (Project Biologist)	Section 2081 Permit	1. 2.	USFWS and CDFG USFWS and CDFG
	1. Before Surveys. Prior to conducting sensitive plant or animal surveys at the Newhall Ranch subdivision map level, the applicant, or its designee, shall consult with the County and CDFG for purposes of establishing and/or confirming the appropriate survey methodology to be used;			3.	Prior to Grading
	2. After Surveys. After completion of sensitive plant or animal surveys at the subdivision map level, draft survey results shall be made available to the County and CDFG within 60 calendar days after completion of the field survey work;				
	3. Subdivision Map Submittal. Within 30 calendar days after the applicant, or its designee, submits its application to the County for processing of a subdivision map in the Mesas Village or Riverwood Village, a copy of the submittal shall be provided to CDFG. In addition, the applicant, or its designee, shall schedule a consultation meeting with the County and CDFG for purposes of obtaining comments and input on the proposed subdivision map submittal. The consultation meeting shall take place at least thirty (30) days prior to the submittal of the proposed subdivision map to the County; and				
	4. Development/Disturbance and Further Mitigation. Prior to any development within, or disturbance to, habitat occupied by rare, threatened, or endangered plant or animal species, or to any portion of the Spineflower Mitigation Area Overlay, as defined below, all required permits shall be obtained from both USFWS and CDFG, as applicable. It is further anticipated that the federal and state permits will impose conditions and mitigation measures required by federal and state law that are beyond those identified in the Newhall Ranch Final EIR (March 1999), the Newhall Ranch DAA (April 2001) and the Newhall Ranch Revised DAA (2002). It is also anticipated that conditions and mitigation measures required by federal and state law				

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

SP 4.6-59. (cont.)

(cont.) for project-related impacts on endangered, rare, or threatened species and their habitat will likely require changes and revisions to Specific Plan development footprints, roadway alignments, and the limits, patterns and techniques associated with project-specific grading at the subdivision map level.

Indirect impacts associated with the interface between the preserved spineflower populations and planned development within the Newhall Ranch Specific Plan shall be avoided or minimized by establishing open space connections with Open Area, River Corridor, or High Country land use designations. In addition, buffers (i.e., setbacks from developed, landscaped, or other use areas) shall be established around portions of the delineated preserve(s) not connected to Open Area, the River Corridor or the High Country land use designations. The open space connections and buffer configurations shall take into account local hydrology, soils, existing and proposed adjacent land uses, the presence of non-native invasive plant species, and seed dispersal vectors.

(This measure will be implemented through the compliance by the applicant with the CDFG 2081 Incidental Take Permit.)

SP 4.6-63. Riparian resources that are impacted by buildout of the Newhall Ranch Applicant (Project Specific Plan shall be restored with similar habitat at the rate of 1 acre replaced for each acre lost. (This measure has been addressed by project-specific Mitigation Measure LV 4.4-1.)

Biologist)

Receipt of Appropriate Permit applications

- ACOE, CDFG
- ACOE, CDFG
- Prior to Issuance of Building Permits

				8	.0 Mitigation Monitoring Pla
4.4 BIOTA	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.6-67.	Open space connections shall be configured such that the spineflower preserves are connected to Open Area, River Corridor, or High Country land use designations to the extent practicable. Open space connections shall be of adequate size and configuration to achieve a moderate to high likelihood of effectiveness in avoiding or minimizing indirect impacts (e.g., invasive plants, increased fire frequency, trampling, chemicals, etc.) to the spineflower preserve(s). Open space connections for the spineflower preserve(s) shall be configured in consultation with the County and CDFG. Open space connections for the spineflower preserve(s) shall be established for the entire Specific Plan area in conjunction with approval of the first Newhall Ranch subdivision map filed in either the Mesa Village, or that portion of the Riverwood Village in which the San Martinez spineflower location occurs.	Applicant	Review of Initial Study and Subdivision	1. 2. 3.	LACDRP/CDFG LACDRP/CDFG Prior to Approval of Subdivision Maps
	For preserves and/or those portions of preserves not connected to Open Area, River Corridor, or High Country land use designations, buffers shall be established at variable distances of between 80 and 200 feet from the edge of development to achieve a moderate to high likelihood of effectiveness in avoiding or minimizing indirect impacts (e.g., invasive plants, increased fire frequency, trampling, chemicals, etc.) to the spineflower preserve(s). The buffer size/configuration shall be guided by the analysis set forth in the "Review of Potential Edge Effects on the San				

spineflower location occurs.

Fernando Valley Spineflower," prepared by Conservation Biology Institute, January 19, 2000, and other sources of scientific information and analysis, which are available at the time the preserve(s) and buffers are established. Buffers for the spineflower preserve(s) shall be configured in consultation with the County and CDFG for the entire Specific Plan area. Buffers for the spineflower preserve(s) shall be established in conjunction with approval of the first Newhall Ranch subdivision map filed in either the Mesa Village, or that portion of the Riverwood Village in which the San Martinez

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

SP 4.6-67. (cont.)

Roadways and road rights-of-way shall not be constructed in any spineflower preserve(s) and buffer locations on Newhall Ranch unless constructing the road(s) in such location is found to be the environmentally superior alternative in subsequently required tiered EIRs in connection with the Newhall Ranch subdivision map(s) process. No other development or disturbance of native habitat shall be allowed within the spineflower preserve(s) or buffer(s).

The project applicant, or its designee, shall be responsible for revegetating open space connections and buffer areas of the Newhall Ranch spineflower preserve(s) to mitigate temporary impacts due to grading that will occur within portions of those open space connections and buffer areas. The impacted areas shall be reseeded with a native seed mix to prevent erosion, reduce the potential for invasive non-native plants, and maintain functioning habitat areas within the buffer area. Revegetation seed mix shall be reviewed and approved by the County and CDFG.(*This measure is implemented by the Landmark Village mitigation measure LV4.4-1 although the project would not impact a spineflower preserve area.*)

LV 4.4-1. Mitigation Measures SP 4.6-1 through SP 4.6-16 specify requirements for riparian mitigation conducted in the High Country SMA/SEA 20, Salt Creek area, and Open Area. The applicant will prepare and implement a plan for mitigation of both riparian and upland habitats (such as riparian adjacent big sagebrush scrub), and incorporates these Mitigation Measures (SP 4.6-1 through SP 4.6-16). A Comprehensive Mitigation Implementation Plan (CMIP) has been developed by Newhall Land that provides an outline of mitigation to offset impacts. The CMIP demonstrates the feasibility of creating the required mitigation acreage to offset project impacts (see LV 4.4-29).

pplicant (Project Wetland
Biologist) Mitigation
Plans and
Upland Habitat
Mitigation
Plans

1. ACC 2. ACC tat 3. Cor Sub

- 1. ACOE, CDFG, LACDRP
- . ACOE, CDFG, LACDRP
- Concurrent with Submittal of Sub-Notification Letters

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

LV 4.4-1. (cont.)

Detailed wetlands mitigation plans, in accordance with the CMIP, shall be submitted to, and are subject to the approval of, the Corps and CDFG as part of the sub-notification letters for individual projects. Individual project submittals shall include applicable CMIP elements, complying with the requirements outlined below. The detailed wetlands mitigation plan shall specify, at a minimum, the following: (1) the location of mitigation sites; (2) site preparation, including grading, soils preparation, irrigation installation, (2a) the quantity (seed or nursery stock) and species of plants to be planted (all species to be native to region); (3) detailed procedures for creating additional vegetation communities; (4) methods for the removal of nonnative plants; (5) a schedule and action plan to maintain and monitor the enhancement/restoration area; (6) a list of criteria by which to measure success of the mitigation sites (e.g., percent cover and richness of native species, percent survivorship, establishment of self-sustaining native plantings, maximum allowable percent of non-native species); (7) measures to exclude unauthorized entry into the creation/enhancement areas; and (8) contingency measures in the event that mitigation efforts are not successful. Individual project detailed wetlands mitigation plans shall also classify the biological value (as "high," "moderate," or "low") of the vegetation communities to be disturbed as defined in these conditions, or may be based on an agency-approved method (e.g., Hybrid Assessment of Riparian Communities (HARC)). The biological value shall be used to determine mitigation replacement ratios required under LV 4.4-29 and LV 4.4-37. The detailed wetlands mitigation plans shall provide for the 3:1 replacement of any Southern California black walnut to be removed from the riparian corridor for individual projects. The plan shall be subject to the approval of the CDFG and the Corps and approved prior to the impact to riparian resources. LV 4.4-31 describes that the functions and values will be assessed for the riparian areas that will be removed, and LV 4.4-29 and LV 4.4-37 describe the replacement ratios for the habitats that will be impacted.

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA		U			- C
LV 4.4-2.	Approximately 156.5 acres of coastal scrub shall be preserved off-site within the High Country SMA, the Salt Creek area, or the River Corridor SMA within the Specific Plan area to offset impacts associated with Landmark Village.	Applicant (Project Biologist)	Submit Offer to Dedicate	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP LACDRP Prior to Issuance of Grading Permits
LV 4.4-3.	Focused surveys for the undescribed species of everlasting (a special-status plant species) shall be conducted by a qualified botanist prior to the commencement of grading/construction activities wherever suitable habitat (primarily river terraces) could be affected by direct, indirect, or secondary construction impacts. The surveys shall be conducted no more than one year prior to commencement of construction activities within suitable habitat, and the surveys shall be conducted at a time of year when the plants can be located and identified. Should the species be documented within the Project boundary, avoidance measures shall be implemented to minimize impacts to individual plants wherever feasible. These measures shall include minor adjustments to the boundaries/location of haul routes and other Project features. If, due to Project design constraints, avoidance of all plants is not possible, then further measures, described in LV 4.4-4, shall be implemented to salvage seeds and/or transplant individual plants. All seed collection and/or transplantation methods, as well as the location of the receptor site for seeds/plants (assumed to be within preserved open space areas of Newhall Ranch along the Santa Clara River), shall be coordinated with CDFG prior to impacting known occurrences of the undescribed everlasting.	Applicant (Project Biologist)	Review of Everlasting Plant Surveys	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG LACDRP/CDFG Prior to Commencement of Grading/Construction Activities

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
<b>4.4 BIOT</b>	A (cont.)				
LV 4.4-4.	For any individual project, or any phase of an individual project, to be located where undescribed everlasting plants may occur, the applicant shall prepare and implement an Undescribed Everlasting Mitigation and Monitoring Plan prior to the issuance of grading permits.  The Plan shall provide for replacement of individual plants to be removed at a minimum 1:1 ratio, within suitable habitat at a site where no future construction-related disturbance will occur. The plan shall specify the	Applicant (Project Biologist)	Review and Approval of an Undescribed Everlasting Mitigation and Monitoring Plan	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG LACDRP/CDFG Prior to the Issuance of Grading Permits

at a minimum 1:1 ratio, within suitable habitat at a site where no future construction-related disturbance will occur. The plan shall specify the following: (1) the location of the mitigation site in protected/preserved areas within the Specific Plan site; (2) methods for harvesting seeds or salvaging and transplantation of individual plants to be impacted; (3) measures for propagating plants (from seed or cuttings) or transferring living specimens from the salvage site to the introduction site; (4) site preparation procedures for the mitigation site; (5) a schedule and action plan to maintain and monitor the mitigation area; (6) the list of criteria and performance standards by which to measure the success of the mitigation site (below); (7) measures to exclude unauthorized entry into the mitigation areas; and (8) contingency measures such as erosion control, replanting, or weeding to implement in the event that mitigation efforts are not successful.

The performance standards for the Undescribed Everlasting Mitigation and Monitoring Plan shall be the following:

- a. Within four years after reintroducing the undescribed everlasting to the mitigation site, the extent of occupied acreage and the number of established, reproductive plants will be no smaller than at the site lost for project construction.
- b. Non-native species cover will be no more than 5 percent absolute cover through the term of the restoration.
- c. Giant reed (*Arundo donax*), tamarisk (*Tamarix ramosissima*), perennial pepperweed (*Lepidium latifolium*), tree of heaven (*Ailanthus altissimus*), pampas grass (*Cortaderia selloana*), and any species listed on the California State Agricultural list (CDFA 2009) or Cal-IPC list of noxious weeds (Cal-IPC 2006, 2007) will not be present on the revegetation site as of the date of completion approval.

4.4 PVOT	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOT	A (cont.)				
LV 4.4-5.	The Draft RMDP Slender Mariposa Lily Mitigation and Monitoring Plan (Dudek 20071) shall be revised and submitted to CDFG and the County for review and approval prior to ground disturbance to occupied habitat. Upon approval, the plan will be implemented by the applicant or its designee. The revised plan will demonstrate the feasibility of enhancing or restoring slender mariposa lily habitat in selected areas to be managed as natural open space (i.e., the Salt Creek area or High Country SMA/SEA 20, spineflower preserves, or River Corridor SMA/SEA 23) without conflicting with other resource management objectives. Habitat replacement/enhancement will be at a 1:1 ratio (acres restored/enhanced to acres impacted).  The revised plan will describe habitat improvement/restoration measures to be completed prior to introducing slender mariposa lily. Habitat improvement/restoration will be based on native occupied slender mariposa lily habitat. The revised plan will specify: (1) the location of mitigation sites (may be selected from among 559 acres of suitable mitigation land in the High Country SMA/SEA 20 and Salt Creek area identified in the Draft Newhall Ranch Mitigation Feasibility Study (Dudek 2007A); (2) a description of "target" vegetation (native shrubs and grasses in occupied slender mariposa lily habitat on Newhall Ranch land (either at sites to be destroyed by construction or at sites to be preserved); (3) site preparation measures to include topsoil treatment, soildecompaction, erosion control, temporary irrigation systems, or other measures as appropriate; (4) methods for the removal of non-native plants (e.g., mowing, weeding, raking, herbicide application, or burning); (5) the source of all plant propagules (seed, potted nursery stock, etc.), the quantity and species of seed or potted stock of all plants to be introduced or planted into the restoration/enhancement areas; (6) a schedule and action plan to maintain and monitor the enhancement/restoration areas, to include at minimum, qualitative annual monitor	Applicant (Project Biologist)	Review and Approval of the Revision to the RMDP Slender Mariposa Lily Mitigation and Monitoring Plan  Monitoring Reports to be Prepared Annually for Five (5) Years	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG LACDRP/CDFG Prior to Ground Disturbance to Occupied Habitat

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

LV 4.4-5. (cont.)

measures such as fencing, signage, or security patrols to exclude unauthorized entry into the restoration/enhancement areas; and (8) contingency measures such as replanting, weed control, or erosion control to be implemented if habitat improvement/restoration efforts are not successful.

Habitat restoration/enhancement will be judged successful when (1) percent cover and species richness of native species reach 50 percent of their cover and species richness at undisturbed occupied slender mariposa lily habitat at reference sites; and (2) the replacement vegetation has persisted at least one summer without irrigation. At that point slender mariposa lily propagules (seed or bulbs) will be introduced onto the site.

The revised plan will specify methods to collect propagules and introduce slender mariposa lily into these mitigation sites. Introductions will use source material (seeds or bulbs) from no more than 1.0 mile distant, similar slope exposures, and no more than 500 ft. elevational difference from the mitigation site, unless otherwise approved by CDFG and the County. Bulbs may be salvaged and transplanted from slender mariposa lily occurrences to be lost; alternately, seed may be collected from protected occurrences, following CDFG-approved seed collection guidelines (*i.e.*, MOU for rare plant seed collection). Newhall Land or its designee will monitor the reintroduction sites for no fewer than five additional years to estimate slender mariposa lily survivorship (for bulbs) or seedling establishment (for seeded sites).

Annual monitoring reports will be prepared and submitted to CDFG and the County and will be made available to the public to guide future mitigation planning for slender mariposa lily. Monitoring reports will describe all restoration/enhancement measures taken in the preceding year; describe success and completion of those efforts and other pertinent site conditions (erosion, trespass, animal damage) in qualitative terms; and describe mariposa lily survival or establishment in quantitative terms.

4.4 BIOTA	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.4-6.	The Oak Resource Replacement Plan to be prepared (as described in <b>SP 4.6-48</b> ) shall include measures to create, enhance, and/or restore 7.82 acres of coast live oak woodland within the High Country SMA/SEA 20. The plan shall be subject to the requirements outlined in <b>SP 4.6-48</b> .  The applicant shall prepare an Oak Resource Management Plan that incorporates the findings of the Draft Newhall Ranch Mitigation Feasibility Report (Dudek 2007A) and areas identified (in the technical report) as being suitable for oak woodland enhancement and creation shall be used as mitigation. Other mitigation sites may be used upon approval by the County. The plan shall be reviewed by the County Forester. The plan shall include the following: (1) site selection and preparation; (2) selection of proper species, including sizes and planting densities; (3) protection from herbivores; (4) site maintenance; (5) success criteria; (6) remedial actions; and (7) a monitoring program.	Applicant (Project Biologist)	Receipt and Review of Oak Resource Replacement Plan	1. 2. 3.	LA County Forester LA County Forester Prior to Final Subdivision Map Recordation
LV 4.4-7.	All oaks that are (1) will not being removed, and (2) that are regulated under the County of Los Angeles Oak Tree Ordinance (CLAOTO) with driplines within 50 feet of land clearing (including brush clearing) or areas to be graded shall be enclosed in a temporary fenced zone for the duration of the clearing or grading activities. Fencing shall extend to the root protection zone (i.e., the area at least 15 feet from the trunk or half again as large as the distance from the trunk to the drip line, whichever distance is greater). No parking or storage of equipment, solvents, or chemicals that could adversely affect the trees shall be allowed within 25 feet of the trunk at any time. Removal of the fence shall occur only after the project arborist or qualified biologist confirms the health of preserved trees.	Applicant (Construction Superintendent)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP  LACDRP  During Grading and All  Phases of Construction

Mitigation Measures/Conditions of Approval 4.4 BIOTA (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.4-8. Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities that result in any disturbance to the banks or wetted channel, aquatic habitats within construction sites and access roads, as well as all aquatic habitats within 300 feet of construction sites and access roads, shall be surveyed by a qualified biologist for the presence of the unarmored threespine stickleback, arroyo chub, and Santa Ana sucker. The Corps and CDFG shall be notified at least 14 days prior to the survey and shall have the option of attending. The biologist shall file a written report of the survey with both agencies within 14 days of the survey and no later than 10 days prior to any construction work in the riverbed.  If there is evidence that fish spawn has occurred in the survey area, then surveys shall cease unless otherwise authorized by USFWS. If surveys determine that gravid fish are present, that spawning has recently occurred, or that juvenile fish are present in the proposed construction areas, all activities within aquatic habitat will be suspended. Construction within aquatic habitats shall only occur when it is determined that juvenile fish are not present within the Project area.	Applicant (Project Biologist)	Surveys conducted for unarmored threespine stickleback, arroyo chub, and Santa Ana sucker  Written report shall be filed 10 days prior to any construction in riverbed	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG/ACOE/ USFWS  LACDRP/CDFG/ACOE/ USFWS  Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities that result in any disturbance to the banks or wetted channel

Mitigation Measures/Conditions of Approval 4.4 BIOTA (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.49. Prior to initiating construction for the installation of bridges, storm drair outlets, utility lines, bank protection, trails, and/or other construction activities, all construction sites and access roads within the riverbed as well as all riverbed areas within 500 feet of construction sites and access roads shall be surveyed at the appropriate season for southwestern pond turtle Focused surveys shall consist of a minimum of four daytime surveys, to be completed between April 1 and June 1. The survey schedule may be adjusted in consultation with CDFG to reflect the existing weather or stream conditions. The applicant shall develop a Plan to address the relocation or southwestern pond turtle. The Plan shall include but not be limited to the timing and location of the surveys that would be conducted for this species identify the locations where more intensive efforts should be conducted identify the habitat and conditions in the proposed relocation site(s); the methods that would be utilized for trapping and relocating individuals; and provide for the documentation/recordation of the numbers of animals relocated. The Plan shall be submitted to CDFG for approval 60 days prior to any ground-disturbing activities within potentially occupied habitat.  If southwestern pond turtles are detected in or adjacent to the Project nesting surveys shall be conducted. Focused surveys for evidence of southwestern pond turtle nesting shall be conducted in, or adjacent to, the Project when suitable nesting habitat exists within 1,300 feet of occupied habitat in an area where Project-related ground disturbance will occur (e.g. development, ground disturbance). If both of those conditions are met, a qualified biologist shall conduct focused, systematic surveys for southwestern pond turtle nesting sites. The survey area shall include all suitable nesting habitat within 1,300 feet of occupied habitat in which Project-related ground disturbance will occur. This area may be adjusted based on the existing topographical features	Biologist)	Receipt and Review of Survey and Relocation Plan for the Southwestern Pond Turtle  The Plan shall be approved by CDFG 60 days	1. 2. 3.	LACDRP/CDFG  Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities that result in any disturbance to the banks or wetted channel.

	Party			
	Responsible for		1.	Enforcement Agency
	<b>Implementing</b>	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

LV 4.4-9. (cont.)

If a southwestern pond turtle nesting area would be adversely impacted by construction activities, the applicant shall avoid the nesting area. If avoidance of the nesting area is determined to be infeasible, the authorized biologist shall coordinate with CDFG to identify if it is possible to relocate the pond turtles. Eggs or hatchlings shall not be moved without written authorization from CDFG.

The qualified biologist shall be present during all activities immediately adjacent to or within habitat that supports populations of southwestern pond turtle. Clearance surveys for pond turtles shall be conducted within 500 feet of potential habitat by the authorized biologist prior to the initiation of construction each day. The resume of the proposed biologist will be provided to CDFG for approval prior to conducting the surveys.

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA (cont.)				
LV 4.4-10. Temporary bridges, culvert crossings, or other feasible methods of providing access across the river shall be constructed outside of the winter season and not during periods when spawning is occurring. Prior to the construction of any temporary or permanent crossing of the Santa Clara River, the applicant shall develop a Stream Crossing and Diversion Plan. The plan shall include the following elements: the timing and methods for pre-construction aquatic species surveys; a detailed description of the diversion methods (e.g., berms shall be constructed of on-site alluvium materials of low silt content, inflatable dams, sand bags, or other approved materials); special-status species relocation; fish exclusion techniques, including the use of block netting and fish relocation; methods to maintain fish passage during construction; channel habitat enhancement, including the placement of vegetation, rocks, and boulders to produce riffle habitat; fish stranding surveys; and the techniques for the removal of crossings prior to winter storm flows. The plan shall be submitted to the USFWS and CDFG for approval at least 30 days prior to implementation.  If adult special-status fishes are present and spawning has not occurred, they shall be relocated prior to the diversion or crossing. Block nets of 0.125-inch woven mesh will be set upstream and downstream. On days with possible high temperature or low humidity (temperatures in excess of 80° F), work will be done in the early morning hours, as soon as sufficient light is available, to avoid exposing fishes to high temperatures and/or low humidity. If high temperatures are present, the fishes have been excluded by herding, a USFWS staff member or his or her agents shall inspect the site for remaining or stranded fish. A USFWS staff member or his or her agents shall relocate the fish to suitable habitat outside the Project area (including those areas potentially subject to high turbidity). During the diversion/relocation of fishes, the USFWS or his or her agents sh	Applicant (Project Biologist)	Review and Approval of a Stream Crossing and Diversion Plan  At least 30 days prior to Implementation of Plan and prior to the construction of any temporary or permanent crossing of the Santa Clara River	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG/ACOE/ USFWS LACDRP/CDFG/ACOE/ USFWS Prior to the construction of any temporary or permanent crossing of the Santa Clara River,
present at all times.				

				8	.0 Mitigation Monitoring Plan
	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA (co	nt.)				
LV 4.4-11. a.	Stream diversion bypass channels:  Stream diversion bypass channels will be constructed when the active wetted channel is within the work zone. Diversion bypass channels will be built in consultation with CDEC/LISEWS. Equipment shall not be	Applicant (Restoration Ecologist)	Placement of Stream Diversion Channels	<ol> <li>2.</li> <li>3.</li> </ol>	CDFG/ACOE/USFWS CDFG/ACOE/USFWS Prior to Construction Activities in an Active Wetted Channel
	be built in consultation with CDFG/USFWS. Equipment shall not be operated in areas of ponded or flowing water unless authorized by CDFG/USFWS.				wetted Channel
	The diversion channel shall be of a width and depth comparable to the natural river channel. In all cases where flowing water is diverted from a segment of the stream channel, the bypass channel will be constructed prior to the diversion of the active stream. The bypass channel will be constructed prior to diverting the stream, beginning in the downstream area and continuing in an upstream direction. Where feasible and in				
	consultation with CDFG/USFWS, the configuration of the diversion channel will be curved (sinuous) with multiple sets of obstructions ( <i>i.e.</i> , boulders, large logs, or other CDFG/USFWS-approved materials) placed in the channel at the point of each curve ( <i>i.e.</i> , on alternating sides of the channel). If emergent aquatic vegetation is present in the original				
	channel, the applicant will transplant suitable vegetation into the diversion channel and on the banks prior to or at the time of the water				

Construction of diversion channels shall not occur if surveys determine that gravid fish are present, spawning has recently occurred, or juvenile fish are present in the proposed construction areas.

adequate to prevent seepage into or from the work area.

diversion. A qualified restoration ecologist will supervise the construction of the diversion channels on site. The integrity of the channel and diversion shall be maintained throughout the intended diversion period. Channel bank or barrier construction shall be

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

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## 4.4 BIOTA (cont.)

### LV 4.4-11. (cont.)

At the conclusion of the diversion, either at the commencement of the winter season, or the completion of construction, the applicant will coordinate with CDFG/USFWS to determine if the diversion should be left in place or the stream returned to the original channel. If CDFG/USFWS determine the stream should be diverted to the original channel, the original channel will be modified prior to re-diversion (*i.e.*, while dry) to construct curves (sinuosity) into that channel, including the placement of obstructions (*i.e.*, boulders, large logs, or other CDFG/USFWS-approved materials). The original channel will be replanted with emergent vegetation as the diversion channel was planted. If the diversion channel is abandoned, the boulders will remain in place.

# b. Dewatering:

Construction dewatering in close proximity to stream flow shall implement the following:

- Assess local stream and groundwater conditions, including flow depths, groundwater elevations, and anticipated dewatering cone of influence (radius of draw down).
- Assess surface water elevations upstream, adjacent to, and downstream of the extraction points, to assess any critical flow regimes susceptible to excessive draw down and therefore fish stranding issues.
- Assess surface water elevations downstream of the discharge locations (if discharge is proposed to the flowing stream) to assess any flow regimes and overbank areas that may be susceptible to flooding and therefore fish stranding at the cessation of discharge.
   Discharge locations shall also be assessed for potential channel bed erosion from dewatering discharge, and appropriate BMPs must be implemented to prevent excessive erosion or turbidity in the discharge.

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase		
4.4 BIOTA (cont.)						
LV 4.4-11. (cont.)						
<ul> <li>The information above shall be summarized and provided in a pla approved by CDFG and Corps.</li> </ul>	n					
Fish shall be excluded from any artificial flowing channels fror dewatering discharge. Methods to ensure separation may include, but are not limited to: block netting at the confluence; creation of a physical drop greater than four inches at the confluence; or maintaining velocity range unsuitable for fish passage, such as a berm at the confluence with small diameter pipes for discharge.	t l a					
LV 4.4-12. Slow-moving water habitats shall be constructed upstream and downstream	* *		1.	LACDRP/CDFG/USFWS		
of any river crossing or bridge construction area to provide refuge for special-status fishes during construction. Where feasible and in consultation		of Slow- Moving Water	2.	LACDRP/CDFG/USFWS		
with CDFG and USFWS, the applicant shall enhance slow-moving water habitats for each linear foot disturbed by hand-excavating shallow side	r e	Habitats Field Verification	· ·		3.	Prior to Any River Crossings or Bridge Construction
channels and placing multiple sets of obstructions ( <i>e.g.</i> , boulders, large log or other CDFG- and USFWS-approved materials) in the channel.	ò,					
LV 4.4-13. Installation of bridges, culverts or other structures shall not impair	* *	Review of	1.	LACDRP		
movement of fish and aquatic life. Bottoms of temporary culverts shall be placed at or below channel grade. Bottoms of permanent culverts shall be		Construction Plan and Field	2.	LACDRP		
placed at of below channel grade. Dottoms of permanent curvers shall placed below channel grade. Culvert crossings shall include provisions for low flow channel where velocities are less than two feet per second to allow fish passage.	a	Verification	3.	Prior to Any River Crossings or Bridge Construction		
LV 4.4-14. Water containing mud, silt, or other pollutants from construction activities		Field	1.	LACDRP		
shall not be allowed to enter a flowing stream or be placed in locations that	•	Verification	2.	LACDRP		
may be subject to normal storm flows during periods when storm flows ca reasonably be expected to occur.	i <i>S</i> uperimenaem)		3.	During Construction		

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA (cont.)				
LV 4.4-15. Temporary impacts from construction activities in the riverbed shall be restricted to the following areas of disturbance: (1) an 85-foot-wide zone that extends into the river from the base of the rip-rap or gunite bank protection where it intercepts the river bottom; (2) 100 feet on either side of the outer edge of a new bridge or bridge to be modified; (3) a 60-foot-wide corridor for utility lines; (4) 20-foot-wide temporary access ramps; and (5) 60-foot roadway width temporary construction haul routes. The locations of these temporary construction sites and the routes of all access roads shall be shown on maps submitted with the sub-notification letter submitted to the Corps and CDFG for individual project approval. Any variation from these limits shall be submitted, with a justification for a variation for Corps and CDFG approval. The construction plans should indicate what type of vegetation, if any, would be temporarily disturbed or removed and the post-construction activities to facilitate revegetation of the temporarily impacted areas. The boundaries of the construction site and any temporary access roads within the riverbed shall be marked in the field with stakes and flagging. No construction activities, vehicular access, equipment storage, stockpiling, or significant human intrusion shall occur outside the work area and access roads.	Applicant (Construction Superintendent)	Construction Plan Review Field Verification	1. 2. 3.	LACDRP/CDFG/ACOE LACDRP/CDFG/ACOE Concurrent with the submission of Sub- Notification Letter

Mitigation Measures/Conditions of Approval 4.4 BIOTA (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.4-16. Prior to initiating construction for the installation of bridges, storm dra outlets, utility lines, bank protection, trails, and/or other construction activities, all construction sites and access roads within the riverbed as we as all riverbed areas within 300 feet of construction sites and access road shall be surveyed at the appropriate season for two-striped garter snake are south coast garter snake. Focused surveys shall consist of a minimum four daytime surveys, to be completed between April 1 and September. The survey schedule may be adjusted in consultation with CDFG to reflet the existing weather or stream conditions. If located, the species will be relocated to suitable pre-approved locations identified in the two-stripe garter snake and/or south coast garter snake Relocation Plan.  The applicant shall develop a Plan to address the relocation of two-stripe garter snake and south coast garter snake. The Plan shall include but not be limited to the timing and location of the surveys that would be conducted for each species, identify the locations where more intensive efforts should be conducted, identify the habitat and conditions in the proposed relocation site(s), identify the methods that would be utilized for trapping are relocating the individual species, and provide for the documentation/recordation of the species and number of animals relocated. The Plan shall be submitted to CDFG for approval 60 days prior to are ground-disturbing activities, within potentially occupied habitat.  The qualified biologist shall be present during all activities immediate adjacent to or within habitat that supports populations of two-striped gard snake and/or south coast garter snake. Clearance surveys for garter snake shall be conducted within 200 feet of potential habitat by the authorize biologist prior to the initiation of construction each day. The resume of the proposed biologists will be provided to CDFG for approval prior conducting the surveys.	Biologist)  Bis	Receipt and Review of Survey and Relocation Plan for the Two- Striped Garter Snake and South Coast Garter Snake  The Plan shall be approved by CDFG 60 days prior ground disturbing activities within potential occupied habitat	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG  LACDRP/CDFG  Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities, all construction sites and access roads within the riverbed as well as all riverbed areas within 300 feet of construction sites and access roads

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA (cont.)					
construct bank prices and within 1 the appropriate or adjace occupied to CDFC by the Umeasure monitor the USF.  1. The expression of the use of	It surveys for arroyo toad shall be conducted. Prior to initiating ction for the installation of bridges, storm drain outlets, utility lines, rotection, trails, and/or other construction activities, all construction ad access roads within the riverbed as well as all riverbed areas 1,000 feet of construction sites and access roads shall be surveyed at ropriate season for arroyo toad. The applicant shall contract with a dibiologist to conduct focused surveys for arroyo toad. If detected in tent to the Project area, no work will be authorized within 500 feet of dishabitat until the applicant provides concurrence from the USFWS and the Corps. The applicant shall implement measures required JSFWS Biological Opinion that either supplement or supercede these es. If present, the applicant shall develop and implement a ring plan that includes the following measures in consultation with the supplicant shall retain a qualified biologist with demonstrated pertise with arroyo toads to monitor all construction activities in tential arroyo toad habitat and assist the applicant in the plementation of the monitoring program. This person will be proved by the USFWS prior to the onset of ground-disturbing intential arroyo toad habitat and assist the applicant in the plementation of the monitoring program. This person will be proved by the USFWS prior to the onset of ground-disturbing intential arroyo toad habitat that supports populations of the onset of construction activities, the applicant shall provide personnel who will be present on work areas within or adjacent to Project area the following information:  A detailed description of the arroyo toad, including color photographs;  The protection the arroyo toad receives under the Endangered Species Act and possible legal action that may be incurred for violation of the Act;	Applicant (Project Biologist)	Receipt and Review of Survey Report for the Arroyo Toad  Field Monitoring	1. 2. 3.	LACDRP/USFWS/CDFG LACDRP/USFWS/CDFG Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities, all construction sites and access roads within the riverbed as well as all riverbed areas within 1,000 feet of construction sites and access roads

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

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### 4.4 BIOTA (cont.)

LV 4.4-17. (cont.)

- The protective measures being implemented to conserve the arroyo toad and other species during construction activities associated with the proposed Project; and
- d. A point of contact if arroyo toads are observed.
- 3. All trash that may attract predators of the arroyo toad will be removed from work sites or completely secured at the end of each work day.
- 4. Prior to the onset of any construction activities, the applicant shall meet on site with staff from the USFWS and the authorized biologist. The applicant shall provide information on the general location of construction activities within habitat of the arroyo toad and the actions taken to reduce impacts to this species. Because arroyo toads may occur in various locations during different seasons of the year, the applicant, USFWS, and authorized biologists will, at this preliminary meeting, determine the seasons when specific construction activities would have the least adverse effect on arroyo toads. The goal of this effort is to reduce the level of mortality of arroyo toads during construction. The parties realize that complete elimination of all mortality is likely not possible because some arroyo toads may occur anywhere within suitable habitat during any given season; the detection of every individual over large areas is impossible because of the small size, fossorial habits, and cryptic coloration of the arroyo toad.
- 5. Where construction can occur in habitat where arroyo toads are widely distributed, work areas will be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat. The authorized biologist will assist in determining the boundaries of the area to be fenced in consultation with the USFWS/CDFG. All workers will be advised that equipment and vehicles must remain within the fenced work areas.

	Party			
	Responsible for		1.	Enforcement Agency
	<b>Implementing</b>	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

### LV 4.4-17. (cont.)

- 6. The authorized biologist will direct the installation of the fence and conduct a minimum of three nocturnal surveys to move any arroyo toads from within the fenced area to suitable habitat outside of the fence. If arroyo toads are observed on the final survey or during subsequent checks, the authorized biologist will conduct additional nocturnal surveys if he or she determines that they are necessary in concurrence with the USFWS/CDFG.
- 7. Fencing to exclude arroyo toads will be at least 24 inches in height.
- 8. The type of fencing must be approved by the authorized biologist and the USFWS/CDFG.
- 9. Construction activities that may occur immediately adjacent to breeding pools or other areas where large numbers of arroyo toads may congregate will be conducted during times of the year (fall/winter) when individuals have dispersed from these areas. The authorized biologist will assist the applicant in scheduling its work activities accordingly.
- 10. If arroyo toads are found within an area that has been fenced to exclude arroyo toads, activities will cease until the authorized biologist moves the arroy o toads.
- 11. If arroyo toads are found in a construction area where fencing was deemed unnecessary, work will cease until the authorized biologist moves the arroyo toads. The authorized biologist in consultation with USFWS/CDFG will then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist and USFWS.

	Party			
	Responsible for		1.	Enforcement Agency
	<b>Implementing</b>	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

# LV 4.4-17. (cont.)

- 12. Any arroyo toads found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, soil, and other habitat features and the proximity to human activities. Clearance surveys shall occur on a daily basis in the work area.
- 13. The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed.
- 14. Staging areas for all construction activities will be located on previously disturbed upland areas designated for this purpose. All staging areas will be fenced within potential toad habitat.
- 15. To ensure that diseases are not conveyed between work sites by the authorized biologist or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force (DAPTF 2009) will be followed at all times.
- 16. Drift fence/pitfall trap surveys will be implemented in toad sensitive areas prior to construction in an effort to reduce potential mortality to this species. Prior to any construction activities in the Project area, silt fence shall be installed completely around the proposed work area and a qualified biologist should conduct a preconstruction/clearance survey of the work area for arroyo toads. Any toads found in the work area should be relocated to suitable habitat. The silt fence shall be maintained for the duration of the work activity.
- 17. The applicant shall restrict work to daylight hours, except during an emergency, in order to avoid nighttime activities when arroyo toads may be present on the access road. Traffic speed should be maintained at 15 mph or less in the work area.

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase
4.4 BIOTA (cont.)		•	•	

- LV 4.4-18. Prior to grading and construction activities, a qualified biologist shall be Applicant (Project Participation in 1. LACDRP/CDFG retained to conduct a Worker Environmental Awareness Program (WEAP) for all construction/contractor personnel. A list of construction personnel who have completed training prior to the start of construction shall be retained on site and this list shall be updated as required when new personnel start work. No construction worker may work in the field for more than five days without participating in the WEAP. The qualified biologist shall provide ongoing guidance to construction personnel and contractors to ensure compliance with environmental/permit regulations and mitigation measures. The qualified biologist shall perform the following:
  - 1. Provide training materials and briefings to all personnel working on site. The material shall include but not be limited to the identification and status of plant and wildlife species, significant natural plant community habitats (e.g., riparian), fire protection measures, and review of mitigation requirements.
  - A discussion of the federal and state Endangered Species Acts, Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, other state or federal permit requirements and the legal consequences of noncompliance with these acts;
  - Attend the pre-construction meeting to ensure that timing/location of construction activities do not conflict with other mitigation requirements (e.g., seasonal surveys for nesting birds, pre-construction surveys, or relocation efforts);
  - 4. Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas. Maps showing the location of special-status wildlife or populations of rare plants, exclusion areas, or other construction limitations (e.g., limitations on nighttime work) will be provided to the environmental monitors and construction crews prior to ground disturbance;

Biologist) a WEAP

Field Verification During Grading and All Phases of Construction Adjacent to Special- Status Habitat

LACDRP/CDFG

Impact Sciences, Inc. 8.0-78 Landmark Village Recirculated Draft EIR 32-92A January 2010

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

## LV 4.4-18. (cont.)

- 5. Discuss procedures for minimizing harm to or harassment of wildlife encountered during construction and provide a contact person in the event of the discovery of dead or injured wildlife;
- 6. Review/designate the construction area in the field with the contractor in accordance with the final grading plan;
- 7. Ensure that haul roads, access roads, and on-site staging and storage areas are sited within grading areas to minimize degradation of vegetation communities adjacent to these areas (if activities outside these limits are necessary, they shall be evaluated by the biologist to ensure that no special-status species habitats will be affected);
- 8. Flag or temporarily fence any construction activity areas immediately adjacent to riparian areas;
- 9. Be present during initial vegetation clearing and grading; and
- Submit to the CDFG an immediate report (within 72 hours) of any conflicts or errors resulting in impacts to special-status biological resources.

Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
pplicant (Project Biologist)	Pre- Construction Surveys for the Western Spadefoot Toads  Monitor Relocation Sites for Five (5) Years and Preparation of Annual Monitoring Report	1. 2. 3.	LACDRP/CDFG LACDRP/CDFG Prior to Ground Disturbance in Aquatic Areas, Construction, or Site Preparation Activities
In	sponsible for nplementing Mitigation	sponsible for inplementing Monitoring Action  Policant (Project Biologist)  Pre-Construction Surveys for the Western Spadefoot Toads  Monitor Relocation Sites for Five (5) Years and Preparation of Annual Monitoring	sponsible for nplementing Monitoring 2.  Mitigation Action 3.  Policant (Project Biologist)  Pre- Construction Surveys for the Western Spadefoot Toads  Monitor Relocation Sites for Five (5) Years and Preparation of Annual Monitoring

	Party			
	Responsible for		1.	Enforcement Agency
	<b>Implementing</b>	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

### 4.4 BIOTA (cont.)

LV 4.4-19. (cont.)

3. The qualified biologist shall monitor the relocation site for five years, involving annual monitoring during and immediately following peak breeding season such that surveys can be conducted for adults as well as for egg masses and larval and post-larval toads. Further, survey data will be provided to CDFG by the monitoring biologist following each monitoring period and a written report summarizing the monitoring results will be provided to CDFG at the end of the monitoring effort. Success criteria for the monitoring program shall include verifiable evidence of toad reproduction at the relocation site.

Mitigation Measures/Conditions of Approval 4.4 BIOTA (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.4-20. Prior to construction the applicant shall develop a relocation plan for coast horned lizard, silvery legless lizard, coastal western whiptail, rosy boa, San Bernardino ringneck snake, and coast patch-nosed snake. The Plan shall include but not be limited to the timing and location of the surveys that would be conducted for each species; identify the locations where more intensive efforts should be conducted; identify the habitat and conditions in the proposed relocation site(s); the methods that would be utilized for trapping and relocating the individual species; and provide for the documentation/recordation of the species and number of the animals relocated. The Plan shall be submitted to CDFG for approval 60 days prior to any ground disturbing activities within potentially occupied habitat.  The Plan shall include the specific survey and relocation efforts that would occur for construction activities that occur both during the activity period of the special status species (generally March to November) and for periods when the species may be present in the work area but difficult to detect due to weather conditions (generally December through February). Thirty days prior to construction activities in coastal scrub, chaparral, oak woodland, riparian habitats, or other areas supporting these species qualified biologists shall conduct surveys to capture and relocate individual coast horned lizard, silvery legless lizard, coastal western whiptail, rosy boa, San Bernardino ringneck snake, and coast patch-nosed snake in order to avoid or minimize take of these special-status species. The plan shall require a minimum of three surveys conducted during the time of year/day when each species is most likely to be observed. Individuals shall be relocated to nearby undisturbed areas with suitable habitat. If construction is scheduled to occur during the low activity period (generally December through February) the surveys shall be conducted prior to this period if possible and exclusion fencing shall be placed	Applicant (Project Biologist)	Receipt and Review of Relocation Plan for Coast Horned Lizard, Silvery Legless Lizard, Coastal Western Whiptail, Rosy Boa, San Bernardino Ringneck Snake, and Coast Patch-Nosed Snake  At least 60 days prior to any ground disturbing activities within potentially occupied habitat	1. 2. 3.	LACDRP/CDFG LACDRP/CDFG Prior to the Commencement of Grading/Construction Activities Within Suitable Habitat

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

LV 4.4-20 (cont.)

Results of the surveys and relocation efforts shall be provided to CDFG in the annual mitigation status report. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.

LV 4.4-21. Within 30 days of ground disturbance activities associated with Applicant (Project construction or grading that would occur during the nesting/breeding season of native bird species potentially nesting on the site (typically March through August in the Project region, or as determined by a qualified biologist), the applicant shall have weekly surveys conducted by a qualified biologist to determine if active nests of bird species protected by the Migratory Bird Treaty Act and/or the California Fish and Game Code are present in the disturbance zone or within 300 feet (500 feet for raptors) of the disturbance zone. The surveys shall continue on a weekly basis with the last survey being conducted no more than 7 days prior to initiation of disturbance work. If ground disturbance activities are delayed, then additional pre-disturbance surveys shall be conducted such that no more than 7 days will have elapsed between the survey and ground disturbance disturbing activities.

> If active nests are found, clearing and construction within 300 feet of the nest (500 feet for raptors) shall be postponed or halted, at the discretion of the biologist in consultation with CDFG, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. In the event that golden eagles establish an active nest in the River Corridor SMA/SEA 23, the buffers will be established in consultation with CDFG. Potential golden eagle nesting will be reported to CDFG within 24 hours. Limits of construction to avoid an active nest shall be established in the field with flagging, fencing, or other appropriate barriers and construction personnel shall be instructed on the sensitivity of nest areas. The biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts on these nests occur. Results of the surveys shall be provided to CDFG in the annual mitigation status report.

Conduct Bird Biologist) Surveys

- LACDRP/CDFG
- LACDRP/CDFG
- Within 30 Days of Ground Disturbance Activities

	Party			
	Responsible for		1.	Enforcement Agency
	<b>Implementing</b>	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

### 4.4 BIOTA (cont.)

LV 4.4-21. (cont.)

For listed riparian songbirds (least Bell's vireo, southwestern willow flycatcher, yellow-billed cuckoo) USFWS protocol surveys shall be conducted. If active nests are found, clearing and construction within 300 feet of the nest shall be postponed or halted, at the discretion of the biologist in consultation with CDFG and USFWS, until the nest is vacated and juveniles have fledged, as determined by the biologist, and there is no evidence of a second attempt at nesting. If no active nests are observed, construction may proceed. If active nests are found, work may proceed provided that construction activity is located at least 300 feet from active nests (or as authorized through the context of the Biological Opinion and 2081b Incidental Take Permit). This buffer may be adjusted provided noise levels do not exceed 60 dB(A) hourly Leq at the edge of the nest site as determined by a qualified biologist in coordination with a qualified acoustician.

If the noise meets or exceeds the 60 dB(A) L<sub>eq</sub> threshold, or if the biologist determines that the construction activities are disturbing nesting activities, the biologist shall have the authority to halt the construction and shall devise methods to reduce the noise and/or disturbance in the vicinity. This may include methods such as, but not limited to, turning off vehicle engines and other equipment whenever possible to reduce noise, installing a protective noise barrier between the nest site and the construction activities, and working in other areas until the young have fledged. If noise levels still exceed 60 dB(A) L<sub>eq</sub> hourly at the edge of nesting territories and/or a noconstruction buffer cannot be maintained, construction shall be deferred in that area until the nestlings have fledged. All active nests shall be monitored on a weekly basis until the nestlings fledge. The qualified biologist shall be responsible for documenting the results of the surveys and the ongoing monitoring and for reporting these results to CDFG and USFWS.

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

### 4.4 BIOTA (cont.)

LV 4.4-21. (cont.)

32-92A

For coastal California gnatcatcher, the applicant shall conduct USFWS protocol surveys in suitable habitat within the Project area and all areas within 500 feet of access or construction-related disturbance areas. Suitable habitats, according to the protocol, include "coastal sage scrub, alluvial fan, chaparral, or intermixed or adjacent areas of grassland and riparian habitats." A permitted biologist shall perform these surveys according to the USFWS' (1997a) Coastal California Gnatcatcher Presence/Absence Survey Guidelines. If a territory or nest is confirmed, the USFWS and CDFG shall be notified immediately. If present, a 500-foot disturbance-free buffer shall be established and demarcated by fencing or flagging. No Project activities may occur in these areas unless otherwise authorized by USFWS and CDFG. Construction activities in suitable gnatcatcher habitat will be monitored by a full-time qualified biologist. The monitoring shall be of a sufficient intensity to ensure that the biologist could detect the presence of a bird in the construction area.

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA (cont.)	-			-
LV 4.4-22. Thirty days prior to construction activities, a qualified biologist shall conduct CDFG protocol surveys to determine whether the burrowing owl is present at the site. The surveys shall consist of three site visits and shall be conducted in areas dominated by field crops, disturbed habitat, grasslands, and along levee locations, or if such habitats occur within 500 feet of a construction zone. If located, occupied burrows shall not be disturbed during the nesting season (February 1 through August 31) unless a qualified biologist approved by CDFG verifies through non-invasive methods that either the birds have not begun egg-laying and incubation or that juveniles from the occupied burrows are foraging independently and are capable of independent survival. If the burrowing owl is detected but nesting is not occurring, construction work can proceed after any owls have been evacuated from the site using CDFG-approved burrow closure procedures and after alternative nest sites have been provided in accordance with the CDFG Staff Report on Burrowing Owl Mitigation (10-17-95).  Unless otherwise authorized by CDFG, a 500-foot buffer, within which no activity will be permissible, will be maintained between Project activities and nesting burrowing owls during the nesting season. This protected area will remain in effect until August 31 or at CDFG's discretion and based upon monitoring evidence, until the young owls are foraging independently.  Results of the surveys and relocation efforts shall be provided to CDFG in the annual mitigation status report.	Biologist)	Conduct Burrowing Owl Surveys Surveys shall be conducted 30 days prior to construction activities	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG LACDRP/CDFG Prior to Construction Activities

Mitigation Measures/Conditions of Approval 4.4 BIOTA (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.4-23. Thirty days prior to construction activities in grassland, scrub, chaparral, oak woodland, riverbank, and agriculture habitats, or other suitable habitat, a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within 200 feet of the disturbance zone for San Diego black-tailed jackrabbit and San Diego desert woodrat.  If San Diego black-tailed jackrabbits are present, non-breeding rabbits shall be flushed from areas to be disturbed. Dens, depressions, nests, or burrows occupied by pups shall be flagged and ground-disturbing activities avoided within a minimum of 200 feet during the pup-rearing season (February 15 through July 1). This buffer may be reduced based on the location of the den upon consultation with CDFG. Occupied maternity dens, depressions, nests, or burrows shall be flagged for avoidance, and a biological monitor shall be present during construction. If unattended young are discovered, they shall be relocated to suitable habitat by a qualified biologist. The applicant shall document all San Diego black-tailed jackrabbit identified, avoided, or moved and provide a written report to CDFG within 72 hours. Collection and relocation of animals shall only occur with the proper scientific collection and handling permits.	Applicant (Project Biologist)	Conduct San Diego Black- tailed Jackrabbit and San Diego Desert Woodrat Surveys  Surveys shall be conducted 30 days prior to construction activities  Report shall be prepared if relocated nest activities are	1. 2. 3.	LACDRP/CDFG LACDRP/CDFG Prior to Construction Activities in Suitable Habitat (grassland, scrub, chaparral, oak woodland, riverbank, and agriculture habitats, or other suitable habitat)

	Party			
	Responsible for		1.	Enforcement Agency
	<b>Implementing</b>	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

LV 4.4-23 (cont.)

If active San Diego desert woodrat nests (stick houses) are identified within the disturbance zone or within 100 feet of the disturbance zone, a fence shall be erected around the nest site adequate to provide the woodrat sufficient foraging habitat at the discretion of the qualified biologist in consultation with CDFG. Clearing and construction within the fenced area will be postponed or halted until young have left the nest. The biologist shall serve as a construction monitor during those periods when disturbance activities will occur near active nest areas to ensure that no inadvertent impacts to these nests will occur. If avoidance is not possible, the applicant will take the following sequential steps: (1) all understory vegetation will be cleared in the area immediately surrounding active nests followed by a period of one night without further disturbance to allow woodrats to vacate the nest, (2) each occupied nest will then be disturbed by a qualified wildlife biologist until all woodrats leave the nest and seek refuge off site, and (3) the nest sticks shall be removed from the Project site and piled at the base of a nearby hardwood tree (preferably a coast live oak or California walnut). Relocated nests shall not be spaced closer than 100 feet apart, unless a qualified wildlife biologist has determined that a specific habitat can support a higher density of nests. The applicant shall document all woodrat nests moved and provide a written report to CDFG.

All woodrat relocation shall be conducted by a qualified biologist in possession of a scientific collecting permit.

4 4 PLOTA	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA	(cont.)				
	Thirty days prior to construction activities in grassland, scrub, chaparral, oak woodland, riverbank, and agriculture habitats, or other suitable habitat a qualified biologist shall conduct a survey within the proposed construction disturbance zone and within 200 feet of the disturbance zone for American badger.	Applicant (Project Biologist)	Conduct American Badger Surveys	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG  LACDRP/CDFG  Prior to Construction  Activities in Suitable Habita
	If American badgers are present, occupied habitat shall be flagged and ground-disturbing activities avoided within 50 feet of the occupied den. Maternity dens shall be avoided during the pup-rearing season (February 15 through July 1) and a minimum 200 foot buffer established. This buffer may be reduced based on the location of the den upon consultation with CDFG. Maternity dens shall be flagged for avoidance, identified on construction		Surveys shall be conducted 30 days prior to construction activities  Report shall be prepared within 30 days of relocation, if relocated nest activities are conducted		(grassland, scrub, chaparral oak woodland, riverbank, and agriculture habitats, or other suitable habitat)
	maps, and a qualified biologist shall be present during construction. If avoidance of a non-maternity den is not feasible, badgers shall be relocated either by trapping or by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more that four inches at a time) before or after the rearing season (February 15 through July 1). Any relocation of badgers shall occur only after consultation with CDFG. A written report documenting the badger removal shall be provided to CDFG within 30 days of relocation.				

scientific collection and handling permits.

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA	A (cont.)				
LV 4.4-25.	No earlier than 30 days prior to the commencement of construction activities, a preconstruction survey shall be conducted by a qualified biologist to determine if active roosts of special-status bats are present on or within 300 feet of the Project disturbance boundaries. Should an active maternity roost be identified (the breeding season of native bat species in California generally occurs from April 1 through August 31), the roost shall not be disturbed and construction within 300 feet shall be postponed or halted, at the discretion of the biological monitor, until the roost is vacated and juveniles have fledged, as determined . Surveys shall include rocky outcrops, caves, structures, and large trees (particularly trees 12 inches in diameter or greater at 4.5 feet above grade with loose bark or other cavities). Trees and rocky outcrops shall be surveyed by a qualified bat biologist ( <i>i.e.</i> , a biologist holding a CDFG collection permit and a Memorandum of Understanding with CDFG allowing the biologist to handle bats). If active maternity roosts or hibernacula are found, the rock outcrop or tree occupied by the roost shall be avoided ( <i>i.e.</i> , not removed) by the Project. If avoidance of the maternity roost must occur, the bat biologist shall survey (through the use of radio telemetry or other CDFG approved methods) for nearby alternative maternity colony sites. If the bat biologist determines in consultation with and with the approval of CDFG that there are alternative roost sites used by the maternity colony and young are not present then no further action is required.	Applicant (Project Biologist)	Conduct Special-status Surveys  Surveys shall be conducted not earlier than 30 days prior to construction activities	1. 2. 3.	LACDRP/CDFG LACDRP/CDFG Prior to Construction Activities in suitable habitat
	If a maternity roost will be impacted by the Project, and no alternative maternity roosts are in use near the site, substitute roosting habitat for the maternity colony shall be provided on, or in close proximity to, the Project site no less than three months prior to the eviction of the colony. Large concrete walls (e.g., on bridges) on south or southwestern slopes that are retrofitted with slots and cavities are an example of structures that may provide alternative potential roosting habitat appropriate for maternity colonies. Alternative roost sites must be of comparable size and proximal in location to the impacted colony. CDFG shall also be notified of any hibernacula or active nurseries within the construction zone.				

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

### 4.4 BIOTA (cont.)

LV 4.4-25 (cont.)

If non-breeding bat hibernacula are found in trees scheduled to be removed or in crevices in rock outcrops within the grading footprint, the individuals shall be safely evicted, under the direction of a qualified bat biologist, by opening the roosting area to allow airflow through the cavity or other means determined appropriate by the bat biologist (e.g., installation of oneway doors). In situations requiring one-way doors, a minimum of one week shall pass after doors are installed and temperatures should be sufficiently warm for bats to exit the roost because bats do not typically leave their roost daily during winter months in southern coastal California. This action should allow all bats to leave during the course of one week. Roosts that need to be removed in situations where the use of one-way doors is not necessary in the judgment of the qualified bat biologist in consultation with CDFG shall first be disturbed by various means at the direction of the bat biologist at dusk to allow bats to escape during the darker hours, and the roost tree shall be removed or the grading shall occur the next day (i.e., there shall be no less or more than one night between initial disturbance and the grading or tree removal). These actions should allow bats to leave during nighttime hours, thus increasing their chance of finding new roosts with a minimum of potential predation during daylight.

If an active maternity roost is located on the Project site, and alternative roosting habitat is available, the demolition of the roost site must commence before maternity colonies form (*i.e.*, prior to March 1) or after young are flying (*i.e.*, after July 31) using the exclusion techniques described above.

4.4 BIOTA	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.4-26.	Any special-status species bat day roost sites found by a qualified biologist during pre-construction surveys conducted per LV 4.4-25, to be directly (within project disturbance footprint) or indirectly (within 300 feet of project disturbance footprint) impacted are to be mitigated with creation of artificial roost sites. The Project applicant shall establish (an) alternative roost site(s) within suitable preserved open space located at an adequate distance from sources of human disturbance.	Applicant (Project Biologist)	Creation of Artificial Roost site	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG  LACDRP/CDFG  Prior to Construction  Activities in suitable habitat
LV 4.4-27.	The Project applicant will retain a qualified biologist to develop an Exotic Wildlife Species Control Plan and implement a control program for bullfrog, African clawed frog, and crayfish. The program will require the control of these species during construction within the River corridor and modified tributaries (bridges, diversions, bank stabilization, and drop structures). The Plan shall include a description of the species targeted for eradication, the methods of harvest that will be employed, the disposal methods, and the measures that would be employed to avoid impacts to sensitive wildlife (e.g., stickleback, arroyo toad, nesting birds) during removal activities (i.e., timing, avoidance of specific areas). Annual monitoring shall occur for the first five years after construction of Project facilities. Monitoring will be conducted within sentinel locations along the River Corridor SMA/SEA 23 and where the Project provides potential habitat for these species (e.g., future ponds and water features). Control shall be conducted within Project facilities where monitoring results indicate that exotic species have colonized an area.	Applicant (Project Biologist)	Preparation of an Exotic Wildlife Species Control Plan Annual monitoring for five (5) years	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP/CFDG  LACDRP/CDFG  Prior to Construction  Activities in suitable habitat
LV 4.4-28.	In order to reduce impacts to biological resources from grading and construction activities, all related activities will be conducted to facilitate the escape of animals to natural areas. Construction and grading activities will begin in disturbed areas in order to avoid stranding animals in isolated patches of vegetation. Trenches will be covered at night to prevent animals from falling into and being trapped in trenches.	Applicant (Project Biologist)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG LACDRP/CDFG Prior to Grading and Construction Activities

Mitigation Measures/Conditions of Approval 4.4 BIOTA (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.4-29. The permanent removal of riparian vegetation communities (including arrow weed scrub, cottonwood-willow riparian forest, Mexican elderberry scrub, coastal and valley freshwater marsh, big sagebrush scrub, mulefat scrub, southern coast live oak riparian forest, southern willow scrub, and river wash) shall be replaced by creating riparian vegetation communities of similar functions and services (see LV 4.4-31), or as allowed under LV 4.4-38 in accordance with the criteria set for the in LV 4.4-1. The permanent removal of CDFG jurisdictional riparian habitats in the river and tributaries shall be replaced by creating riparian habitats of similar functions and values (see LV 4.4-31 on the Project site, or as allowed under LV 4.4-37.	Applicant (Project Biologist)	Creation of Vegetation Sites/Revegetati on Plan	1. 2. 3.	LACDRP/CDFG/ACOE  LACDRP/CDFG/ACOE  Concurrent with Submittal of Sub-Notification Letters and Detailed Wetland Mitigation Plans

Riparian habitat meeting success criteria (see LV 4.4-34) two years in advance of the removal or riparian habitat cannot meet the success criteria two years in advance of the project, the ratios listed below in Table 4.4-12

will apply.

	Party			
	Responsible for		1.	<b>Enforcement Agency</b>
	<b>Implementing</b>	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

Table 4.4-12 CDFG Jurisdictional Permanent Impacts Mitigation Ratios

Ratios Listed by Vegetation Types & Quality								
		HIGH Reach Value*	MEDIUM Reach Value**	LOW Reach Value***				
Vegetation Community	Veg Code / ID	(Mit. Ratio)	(Mit. Ratio)	(Mit. Ratio)				
Southern Cottonwood–Willow Riparian Forrest	SCWRF	4:1	3:1	2:1				
Southern Willow Scrub	SWS	3:1	2.5:1	2:1				
Oak Woodland (Coast Live, Valley)	CLOW/VOW	3:1	2.5:1	2:1				
Big Sagebrush Scrub	BSS	2.5:1	2:1	1.5:1				
Mexican Elderberry Scrub	MES	2.5:1	2:1	1.5:1				
Cismontane Alkaline Marsh	CAM	2.5:1	2:1	1.5:1				
Coastal and Valley Fresh Water Marsh	CFWM	2:1	1.5:1	1:1				
Mulefat Scrub	MFS	2:1	1.5:1	1.25:1				
Arrowweed Scrub	AWS	2:1	1.5:1	1:1				
California Sagebrush scrub, and CSB-dominated habitats	CSB, CSB-A, -BS, -CB, -CHP, and -PS	2:1	1.5:1	1:1				
Herbaceous Wetland	HW	1.5:1	1.25:1	1:1				
River Wash, emergent veg.	RW	1.5:1	1.25:1	1:1				
Chaparral, Chamise Chaparral	CHP, CC	1.5:1	1.25:1	1:1				
Coyote Brush Scrub	CYS	1.5:1	1.25:1	1:1				
Eriodictyon Scrub	EDS	1.5:1	1.25:1	1:1				
California Grass Lands	CGL	1:1	1:1	1:1				
Agricultural / Disturbed / Developed	AGR/DL/DEV	1:1	1:1	1:1				

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

#### Notes:

- \* HIGH reach value indicates a portion of the Santa Clara River or main tributary that scored above 0.79 Total Score utilizing the HARC methodology described in Section 4.2, Geomorphology and Riparian Resources, of the Draft EIS/EIR.
- \*\* MEDIUM reach value indicates a portion of the Santa Clara River or main tributary that scored between 0.4 and 0.79 Total Score utilizing the HARC methodology described in Section 4.2.
- \*\*\* LOW reach value indicates a portion of the Santa Clara River or main tributary that scored below 0.4 Total Score utilizing the HARC methodology described in Section 4.2.

Ratios for Permanent Impacts to all classifications: Mitigation initiated two years prior to disturbance: 1:1 ratio; mitigation initiated less than two years after disturbance shall follow ratios in table above; mitigation initiated two to five years after disturbance shall add 0.5 to each value in the table above; and over five years, 1.0 is added to each value in the table above. (For example, initiation of mitigation of mulefat scrub three years after disturbance for a high habitat impact would be a ratio of 2.5:1, instead of 2:1 if initiated within two years of disturbance or 3:1 if initiated more than five years after disturbance.)

Ratios for Temporary Impacts to all classifications: Disturbance period less than two years, 1:1; two to five years, 1:5:1; over five years, 2:1, except for removal of southern cottonwood and oak woodlands, which shall be mitigated at 2:1 for High, 1.5:1 for Medium, and 1:1 for Low for all periods (except for pre-mitigated, which is 1:1).

Exotic/Invasive Species Removal, followed by restoration/revegetation, may be used to offset impacts above. Mitigation shall be credited at an acreage equivalent to the percentage of exotic vegetation at the restoration site. This means, for example, if a 10-acre area is occupied by 10% exotic species, restoration will be credited for 1 acre of impact. As appropriate and authorized by CDFG, reduced percentage credits may be applied for invasive removal with passive restoration (weeding and documentation of natural recruitment only).

Mitigation Measures/Conditions of Approval 4.4 BIOTA (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.4-30. Creation of new vegetation communities and restoration of impacted vegetation communities shall occur at suitable sites in or adjacent to the watercourses or in areas where bank stabilization would occur. The highest-priority vegetation community restoration sites are to be new riverbed and tributary areas created, or disturbed sites impacted, during the excavation of uplands for bank protection/stabilization activities. Restoration sites may also occur at locations outside the riverbed where there are appropriate hydrologic conditions to create a self-sustaining riparian vegetation community and where upland and riparian vegetation community values are absent or very low. All sites shall contain suitable hydrological conditions and surrounding land uses to ensure a self-sustaining functioning riparian vegetation community. Candidate restoration sites shall be described in the annual mitigation status report (LV 4.4-41). Sites will be approved when the detailed wetlands mitigation plans are submitted to the Corps and CDFG as part of the sub-notification letters submitted for individual projects. Status of the sites will be addressed as part of the annual mitigation status report and mitigation accounting form	Applicant (Project Biologist)	Creation of Vegetation Sites/Revegetati on Plans Preparation of Annual Mitigation Status Reports	1. 2. 3.	LACDRP/CDFG/ACOE  LACDRP/CDFG/ACOE  Concurrent with Submittal of Sub-Notification Letters and Detailed Wetland Mitigation Plans

agency review. Each revegetation plan will include acreages, maps, and site specific descriptions of the proposed revegetation site, including analysis of soils, hydrologic suitability, and present and future adjacent land uses.

Mitigation Measures/Conditions of Approval 4.4 BIOTA (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.4-31. Replacement vegetation communities shall be designed to replace the functions and values of the vegetation communities being removed. The replacement vegetation communities shall have similar dominant trees and understory shrubs and herbs (excluding exotic species) to those of the affected example of recommended plant species for the River Corridor SMA/SEA 23 and tributaries). In addition, the replacement vegetation communities shall be designed to replicate the density and structure of the affected vegetation communities once the replacement vegetation communities have met the mitigation success criteria.	Applicant (Project Biologist)	Creation of Vegetation Sites/Revegetati on Plans Preparation of Annual Mitigation Status Reports	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG/ACOE LACDRP/CDFG/ACOE Concurrent with Submittal of Sub-Notification Letters and Detailed Wetland Mitigation Plans

Table 4.4-13
Potential Plant Species for Vegetation Community Restoration in the River Corridor SMA/SEA 23 and Tributaries

Trees	
red willow	Salix laevigata
arroyo willow	Salix lasiolepis
Fremont cottonwood	Populus fremontii
black cottonwood	Populus balsamifera ssp. trichocarpa
western sycamore	Platanus racemosa
Shrubs	
mulefat	Baccharis salicifolia
sandbar willow	Salix exigua
arrow weed	Pluchea sericea
Herbs	
mugwort	Artemisia douglasiana
western ragweed	Ambrosia psilostachya
cattail	Typha latifolia
bulrush	Scirpus americanus
prairie bulrush	Scirpus maritimus

Note: This is a recommended list. Other species may be found suitable based on site conditions and state and federal permits.

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA (cont.)				
LV 4.4-32 Average plant spacing shall be determined based on an analysis of vegetation communities to be replaced. The applicant shall develop plant spacing specifications for all riparian vegetation communities to be restored. Plant spacing specifications shall be reviewed and approved by the Corps and CDFG when restoration plans are submitted to the agencies as part of the sub-notification letters submitted to the Corps and CDFG for individual projects or as part of the annual mitigation.	Applicant (Project Biologist)	Creation of Vegetation Sites/Revegetati on Plans Preparation of Annual Mitigation Status Reports	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG/ACOE  LACDRP/CDFG/ACOE  Concurrent with Submittal of Sub-Notification Letters and Detailed Wetland Mitigation Plans
LV 4.4-33. If at any time prior to Agency approval of the restoration area, the site is subject to an act of God (flood, fires, or drought), the applicant shall be responsible for replanting the damaged area. The site will be subject to the same success criteria as provided for LV 4.4-34. Should a second act of God occur prior to Agency approval of the restoration area, the applicant shall coordinate with the Agencies to develop an alternative restoration strategy(ies) to meet success requirements. This may include restoration elsewhere in the River corridor or tributaries.	Applicant (Project Biologist)	Creation of Vegetation Sites/Revegetati on Plans  Preparation of Annual Mitigation Status Reports	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	CDFG/ACOE CDFG/ACOE Concurrent with Submittal of Sub-Notification Letters and Detailed Wetland Mitigation Plans

		Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA	(co		<u> </u>			
LV 4.4-34.	fol rec	ne revegetation site will be considered "complete" upon meeting all of the llowing success criteria. In a sub-notification letter, the applicant may quest modification of success criteria on a project by project basis. Exceptance of such request will be at the discretion of CDFG and the Corps.	Applicant (Project Biologist)	Field Verification	1. 2. 3.	CDFG/ACOE CDFG/ACOE Completion of Revegetation
	<ol> <li>Regardless of the date of initial planting, any restoration site must have been without active manipulation by irrigation, planting, or seeding for a minimum of three years prior to Agency consideration of successful completion.</li> </ol>			Site		
	2.	The percent cover and species richness of native vegetation shall be evaluated based on local reference sites established by CDFG and the Corps for the plant communities in the impacted areas.				
	3.	Native shrubs and trees shall have at least 80 percent survivorship after two years beyond the beginning of the success evaluation start date. This may include natural recruitment.				
	4.	Non-native species cover will be no more than 5 percent absolute cover through the term of the restoration.				
	5.	Giant reed ( <i>Arundo donax</i> ), tamarisk ( <i>Tamarix ramosissima</i> ), perennial pepperweed ( <i>Lepidium latifolium</i> ), tree of heaven ( <i>Ailanthus altissimus</i> ), pampas grass ( <i>Cortaderia selloana</i> ) and any species listed on the California State Agricultural list, or Cal-IPC list of noxious weeds will not be present on the revegetation site as of the date of completion approval.				
	sit jur sit jur	sing the HARC assessment methodology, the compensatory mitigation is shall meet or exceed the baseline functional scores of the impact area in risdictional waters of the United States. If the compensatory mitigation is cannot meet or exceed the baseline functional score of the impact area in risdictional waters of the United States, additional mitigation area would required to compensate for the functional loss.				

4.4 BIOTA	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.4-35.	Temporary irrigation shall be installed as necessary for plant establishment. Irrigation shall continue as needed until the restoration site becomes self sustaining regarding survivorship and growth. Irrigation shall be terminated in the fall to provide the least stress to plants.	Applicant (Project Biologist)	Field Verification	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG/ACOE LACDRP/CDFG/ACOE As-needed basis
LV 4.4-36.	As an alternative to the creation/restoration of vegetation communities to compensate for permanent removal of riparian vegetation communities, in the Santa Clara River, the applicant may control invasive exotic plant species within the Upper Santa Clara River Sub-Watershed for a portion of the Santa Clara River mitigation required under LV 4.4-29. The applicant may perform this work or contribute "in-lieu fees" to the Upper Santa Clara River Arundo/Tamarisk Removal Program to perform this work, if available. The weed control sites shall be selected in a coordinated, logical manner to ensure that giant reed and other invasive weeds are controlled to improve and expand wildlife and endangered species habitat; reduce flooding, erosion, and fire hazards; improve water quality; and potentially increase stream flow/water quantity in the project watercourses. Removal areas shall be kept free of exotic plant species for 5 years after initial treatment. In areas where extensive exotic removal occurs, revegetation with native plants or natural recruitment shall be documented.	Applicant (Project Biologist)	Creation of Vegetation Sites/Revegetati on Plan or Contribute to "In-Lieu Fees" to the Upper Santa Clara River Arundo/Tamari sk Removal Program	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	CDFG/ACOE CDFG/ACOE Concurrent with Submittal of Sub-Notification Letters and Detailed Wetland Mitigation Plans
LV 4.4-37.	The exotics control program may utilize methods and procedures in accordance with the provisions in the Upper Santa Clara River Watershed Arundo/Tamarisk Removal Plan Final Environmental Impact Report, dated February 2006, or the applicant may propose alternative methods and procedures for Corps and CDFG review and approval pursuant to a subnotification letter . Exotic plant species control will be credited for 1 acre of mitigation.	Applicant (Project Biologist)	Preparation of an Exotic Control Program	<ol> <li>2.</li> <li>3.</li> </ol>	CDFG/ACOE CDFG/ACOE Concurrent with Submittal of Sub-Notification Letters

Mitigation Measures/Conditions of Approval 4.4 BIOTA (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.4-38. All native riparian trees with a 3-inch diameter at breast height (greater in temporary construction areas shall be replaced using gallon container plants, containered trees, or pole cuttings in the ten construction areas in the winter following the construction disturbar growth and survival of the replacement trees shall meet the perforstandards specified in LV 4.4-34. In addition, the growth and survival planted trees shall be monitored until they meet the self-sustaining criteria in accordance with the methods and reporting procedures spin LV 4.4-34, LV 4.4-40, and LV 4.4-41.	nporary nce. The rmance al of the success pecified	Field Verification	1. 2. 3.	CDFG/ACOE CDFG/ACOE Completion of Revegetation Site
LV 4.4-39. Vegetation communities temporarily impacted by the proposed project be revegetated as described in LV 4.4-29. Large trunks of removed trealso remain on site to provide habitat for invertebrates, reptiles, and mammals or may be anchored within the project site for erosion confacilitate restoration, mulch, or native topsoil (the top 6- to 12-incollayer containing organic material), may be salvaged from the work prior to construction. Following construction, salvaged topsoil is returned to the work area and placed in the restoration site. With year, the project biologist will evaluate the progress of restoration as in the temporary impact areas to determine if natural recruitment he sufficient for the site to reach performance goals. In the event that plant recruitment is determined by the project biologist to be inadequent successful habitat establishment, the site shall be revegetated in account with the methods designed for permanent impacts (i.e., seeding, complants, and/or a temporary irrigation system may be recommended will help ensure the success of temporary mitigation areas. The appears the temporary construction area per the success criteriation described in LV 4.4-1, LV 4.4-29, and LV 4.4-34. Annual more reports on the status of the recovery or temporarily impacted areas submitted to the Corps and CDFG as part of the annual mitigation report (LV 4.4-40 and LV 4.4-41).	Biologist) d small trol. To ch deep rk area hall be nin one ctivities as been r native uate for ordance ontainer d). This oplicant ria and nitoring shall be	Creation of Vegetation Sites/Revegetati on Plan Field Verification	1. 2. 3.	CDFG/ACOE CDFG/ACOE Concurrent with Submittal of Sub-Notification Letters and Detailed Wetland Mitigation Plans

4.4 BIOTA (con	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
app	provide an accurate and reliable accounting system for mitigation, the blicant shall file a mitigation accounting form annually with the Corps I CDFG by April 1.	Applicant (Project Biologist)	Preparation of a Mitigation Accounting Form	1. 2. 3.	CDFG/ACOE CDFG/ACOE April 1 of each year until success criterion have been met
in I loca "in- perf repe spec reve met exol a d exol pho (see plar miti capa	annual mitigation status report shall be submitted to the Corps and FG by April 1 of each year until satisfaction of success criteria identified LV 4.4-34. This report shall include any required plans for plant spacing, ations of candidate restoration and weed control sites or proposed lieu fees," restoration methods, and vegetation community restoration formance standards. For active vegetation community creation sites, the ort shall include the survival, percent cover, and height of planted cies; the number by species of plants replaced; an overview of the egetation effort and its success in meeting performance criteria; the thod used to assess these parameters; and photographs. For active stics control sites, the report shall include an assessment of weed control; description of the relative cover of native vegetation, bare areas, and stic vegetation; an accounting of colonization by native plants; and otographs. The report shall also include the mitigation accounting form to LV 4.4-40), which outlines accounting information related to species need or exotics control and mitigation credit remaining. The annual igation and monitoring report shall document the current functional sacity of the compensatory mitigation site using the HARC assessment thodology, as well as documenting the baseline functional scores of the pact site in jurisdictional waters of the United States.	Applicant (Project Biologist)	Annual Mitigation Status Report	1. 2. 3.	CDFG/ACOE  April 1 of each year until success criterion have been met
alor	or to the construction of adjacent developments, signs will be placed ng the roads indicating potential wildlife crossings where mountain lions I mule deer are known to cross in consultation with CDFG.	Applicant (Project Biologist)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG  LACDRP/CDFG  Prior to Construction of Adjacent Developments

Mitigation Measures/Conditions of Approval 4.4 BIOTA (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.4-43. Development areas shall have dust control measures implemented and maintained to prevent dust from impacting vegetation communities and special-status plant and aquatic wildlife species. Dust control shall comply with SCAQMD Rule 403d (SCAQMD 2005). Where construction activities occur within 100 feet of known special-status plant species locations, chemical dust suppression shall not be utilized. Where determined necessary by a qualified biologist, a screening fence ( <i>i.e.</i> , a six-foot-high chain link fence with green fabric up to a height of 5 feet) shall be installed to protect special-status species locations.	Applicant (Project Biologist)	Field Verification	1. 2. 3.	LACDRP/CDFG LACDRP/CDFG During Grading Activities
LV 4.4-44. Plant palettes proposed for use on landscaped slopes, street medians, park sites, and other public landscaped and FMZ areas within 100 feet of native vegetation communities shall be reviewed by a qualified restoration specialist to ensure that the proposed landscape plants will not naturalize and require maintenance or cause vegetation community degradation in the open space areas (River Corridor SMA/SEA 23, High Country SMA/SEA 20, Salt Creek area, and natural portions of the Open Area). Container plants to be installed within public areas within 200 feet of the open space areas shall be inspected by a qualified restoration specialist for the presence of disease, weeds, and pests, including Argentine ants. Plants with pests, weeds, or diseases shall be rejected. In addition, landscape plants within 100 feet of native vegetation communities shall not be on the Cal-IPC California Invasive Plant Inventory (most recent version) or on the list of Invasive Ornamental Plants listed in Appendix B of the SCP. The current Cal-IPC list can be obtained from the Cal-IPC website (http://www.cal-ipc.org/ip/inventory/index.php). Landscape plans will include a plant palette composed of native or non-native, non-invasive species that do not require high irrigation rates. Except as required for fuel modification, irrigation of perimeter landscaping shall be limited to temporary irrigation (i.e., until plants become established).	Applicant (Landscape Architect)	Review and approval of Landscape Plans by Qualified Restoration Specialist	1. 2. 3.	LACDRP  Prior to Approval of  Landscape Plans

44000	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA	a (cont.)				
LV 4.4-45.	Waste and recycling receptacles that discourage foraging by wildlife species adapted to urban environments shall be installed in common areas and parks throughout the Landmark Village site.	Landmark Village Homeowners Association	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP  LACDRP  Prior to Issuance of Occupancy Permits
LV 4.4-46.	An Integrated Pest Management (IPM) plan that addresses the use of pesticides (including rodenticides and insecticides) on site will be prepared prior to the issuance of building permits for the initial tract map. Preparation of the covenants, conditions, and restrictions (CC&Rs) for each tract map shall include language that prohibits the use of anticoagulant rodenticides in the Project site	Applicant	Review of Integrated Pest Management Plan and CC&Rs	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP LACDRP Prior to Issuance of Building Permits
LV 4.4-47.	The applicant or the Natural Lands Management Organization (NLMO) shall fund or otherwise coordinate the regular removal of trash and debris from riparian habitats on or adjacent to the project site. The removal of trash shall be conducted in a manner as to not disturb sensitive habitats	Natural Lands Management Organization (NLMO)	Field Verification or payment of fees	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP LACDRP Ongoing
LV 4.4-48.	Each tract map Home Owners' Association shall supply educational information to future residents regarding pets, wildlife, and open space areas. The material shall discuss the presence of native animals (e.g., coyote, bobcat, mountain lion), indicate that those native animals could prey on pets, indicate that no actions shall be taken against native animals should they prey on pets allowed outdoors, and indicate that pets must be leashed while using the designated trail system and/or in any areas within or adjacent to open space. Control of stray and feral cats and dogs will be conducted in open space areas on an as-needed basis by the NLMO(s) or the Newhall Ranch JPA managing the River Corridor SMA/SEA 23, High Country SMA/SEA 20, or Salt Creek area or by the HOAs managing the Open Areas. Feral cats and dogs may be trapped and deposited with the local Society for the Prevention of Cruelty to Animals or the Los Angeles County Department of Animal Control.	Landmark Village Homeowners Association	Supply written material regarding the presence of native animals	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG LACDRP/CDFG Ongoing

4.4 BIOTA	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.4-49.	Permanent fencing shall be installed along all River Corridor SMA/SEA 23 trails adjacent to the Santa Clara River, or other sensitive resources, in order to minimize impacts associated with increased human presence on protected vegetation communities and special-status plant and wildlife species. The fencing will be split rail to avoid inhibiting wildlife movement. Viewing platforms will be located in land covers currently mapped as agriculture, disturbed land, or developed land.	Applicant	Field Verification	1. 2. 3.	LACDRP  LACDRP  During Construction of the Trail
LV 4.4-50.	A cowbird trapping program shall be implemented once vegetation clearing begins and maintained throughout the construction, maintenance, and monitoring period of the riparian restoration sites. A minimum of five traps shall be utilized, with at least one trap adjacent to the project site and one or two traps located at feeding areas or other CDFG-approved location. The trapping contractor may consult with CDFG to request modification of the trap location(s). CDFG must approve any relocation of the traps. Traps will be maintained beginning each year on April 1 and concluding on/or about November 1 (may conclude earlier, depending upon weather conditions and results of capture). The trapping contractor may also consult CDFG on a modified, CDFG-approved trapping schedule modification. The applicant shall follow CDFG and USFWS protocol. In the event that trapping is terminated after the first few years, subsequent phases of the RMDP development will require initiation of trapping surveys to determine whether re-establishment of the trapping program is necessary.	Applicant (Project Biologist)	Preparation and Approval of Cow-Bird Trapping Program Trapping Surveys as necessary	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP/CDFG  LACDRP/CDFG  Prior to Issuance of Grading Permits

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA (cont.)				
LV 4.4-51. Following the completion and occupancy of a development area, quarterly	Applicant (Project	Quarterly	1.	CDFG
monitoring shall be initiated for Argentine ants along the urban-open space	Biologist)	Monitoring for	2	CDEC

interface at sentinel locations where invasions could occur (e.g., where moist microhabitats that attract Argentine ants may be created). A qualified biologist shall determine the monitoring locations. Ant pitfall traps will be placed in these sentinel locations and operated on a quarterly basis to detect invasion by Argentine ants. If Argentine ants are detected during monitoring, direct control measures will be implemented immediately to help prevent the invasion from worsening. These direct controls may include but are not limited to nest/mound insecticide treatment, or available natural control methods being developed. A general reconnaissance of the infested area would also be conducted to identify and correct the possible source of the invasion, such as uncontrolled urban runoff, leaking pipes, or collected water. Monitoring and control of Argentine ants would occur for a 5-year period.

Monitoring for Biologist) Argentine Ants

- 2. CDFG
- 3. Following the Issuance of Occupancy Permits for 5years

4.4 BIOTA	Mitigation Measures/Conditions of Approval	Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.4-52.	Thirty days prior to construction activities, a qualified biologist shall conduct a preconstruction survey for ringtail. The survey area shall include suitable riparian and woodland habitat (southern coast live oak riparian forest, southern cottonwood—willow riparian forest, southern willow scrub, coast live oak woodland, valley oak woodland, and mixed oak woodland) within the construction disturbance zone and a 300-foot buffer around the construction site. Should the ringtail be observed in the breeding and rearing period of February 1 through August 31, no construction-related activities shall occur within 300 feet of the occupied area for the period of February 1 through August 31 or until the ringtail has been determined by a qualified biologist (in consultation with CDFG) to no longer occupy areas within 300 feet of the construction zone and/or that construction activities would not adversely affect the successful rearing of young. If the ringtail is observed within the construction disturbance zone or in the 300-foot buffer around the construction site in the nonbreeding/rearing period of September 1 through January 31, and avoidance is not possible, denning ringtail shall be safely evicted under the direction of a qualified biologist (as determined by a Memorandum of Understanding with CDFG). All activities that involve the ringtail shall be documented and reported to CDFG.	Applicant (Project Biologist)	Preconstruction survey for Ringtail  Documentation shall be reported to CDFG	1. 2. 3.	LACDRP/CDFG LACDRP/CDFG Prior to Construction Activities
	outside riparian areas greater than one inch dbh shall be replaced in the ratio of at least 2:1. Multi-trunk trees/shrub dbh shall be calculated based on combined trunk dbh. Mitigation shall be deemed complete when each replacement tree attains at least one inch in diameter one foot above the base.	Biologist)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP LACDRP On-going
LV 4.4-54.	During any stream diversion or culvert installation activity, a qualified biologist(s) shall be present and shall patrol the areas within, upstream, and downstream of the work area. The biologists shall inspect the diversion and inspect for stranded fish or other aquatic organisms. Under no circumstances shall the unarmored threespine stickleback be collected or relocated, unless USFWS personnel or their agents implement this measure. Any event involving stranded fish shall be recorded and reported to CDFG and USFWS within 24 hours.	Applicant (Project Biologist)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	CDFG/USFWS CDFG/USFWS During to Stream Diversion of Culvert Installation Activity

	Party			
	Responsible for		1.	<b>Enforcement Agency</b>
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase
4.4 BIOTA (cont.)				

- LV 4.4-55. Conduct focused surveys for California red-legged frogs. Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities, all construction sites and access roads within the riverbed as well as all riverbed areas within 1,000 feet of construction sites and access roads shall be surveyed at the appropriate season for California red-legged frogs. The applicant shall contract with a qualified biologist to conduct focused surveys for California red-legged frogs. If detected in or adjacent to the Project area, no work will be authorized within 500 feet of occupied habitat until the applicant provides concurrence from the USFWS to CDFG and Corps. If present, the applicant shall implement measures required by the USFWS Biological Opinion for California red-legged frog that either supplement or supercede these measures. If present, the applicant shall develop and implement a monitoring plan that includes the following measures in consultation with the USFWS and CDFG.
  - 1. The applicant shall retain a qualified biologist with demonstrated expertise with California red-legged frogs to monitor all construction activities in potential red-legged frog habitat and assist the applicant in the implementation of the monitoring program. This person will be approved by the USFWS prior to the onset of ground-disturbing activities. This biologist will be referred to as the authorized biologist hereafter. The authorized biologist will be present during all activities immediately adjacent to or within habitat that supports populations of California red-legged frogs.
  - 2. Prior to the onset of construction activities, the applicant shall provide all personnel who will be present on work areas within or adjacent to the Project area the following information:
    - a. A detailed description of the California red-legged frogs, including color photographs;
    - The protection the California red-legged frog receives under the Endangered Species Act and possible legal action that may be incurred for violation of the Act;

plicant (Project Conduct
Biologist) Focused
Surveys for
California Redlegged Frogs

If present, an monitoring plan shall be developed and implemented

- 1. CDFG/USFWS
- 2. CDFG/USFWS
- Prior to initiating construction for the installation of bridges, storm drain outlets, utility lines, bank protection, trails, and/or other construction activities

	Party			
	Responsible for		1.	Enforcement Agency
	<b>Implementing</b>	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

## 4.4 BIOTA (cont.)

LV 4.4-55 (cont.)

- c. The protective measures being implemented to conserve the California red-legged frogs and other species during construction activities associated with the proposed Project; and
- d. A point of contact if California red-legged frogs are observed.
- 3. All trash that may attract predators of the California red-legged frogs will be removed from work sites or completely secured at the end of each work day.
- 4. Prior to the onset of any construction activities, the applicant shall meet on site with staff from the USFWS and the authorized biologist. The applicant shall provide information on the general location of construction activities within habitat of the California red-legged frogs and the actions taken to reduce impacts to this species. Because California red-legged frogs may occur in various locations during different seasons of the year, the applicant, USFWS, and authorized biologist will, at this preliminary meeting, determine the seasons when specific construction activities would have the least adverse effect on California red-legged frogs. The goal of this effort is to reduce the level of mortality of California red-legged frogs during construction.
- 5. Work areas will be fenced in a manner that prevents equipment and vehicles from straying from the designated work area into adjacent habitat. The authorized biologist will assist in determining the boundaries of the area to be fenced in consultation with the USFWS/CDFG. All workers will be advised that equipment and vehicles must remain within the fenced work areas.
- 6. The authorized biologist will direct the installation of the fence and conduct a minimum of three nocturnal surveys to move any California red-legged frogs from within the fenced area to suitable habitat outside of the fence. If California red-legged frogs are observed on the final survey or during subsequent checks, the authorized biologist will conduct additional nocturnal surveys if he or she determines that they are necessary in concurrence with the USFWS/CDFG.

	Party			
	Responsible for		1.	Enforcement Agency
	<b>Implementing</b>	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

8.0-110

## 4.4 BIOTA (cont.)

# LV 4.4-55 (cont.)

- 7. Fencing to exclude California red-legged frogs will be at least 24 inches in height.
- The type of fencing must be approved by the authorized biologist and the USFWS/CDFG.
- 9. Construction activities that may occur immediately adjacent to breeding pools or other areas where large numbers of California redlegged frogs may congregate will be conducted during times of the year (fall/winter) when individuals have dispersed from these areas. The authorized biologist will assist the applicant in scheduling its work activities accordingly.
- 10. If California red-legged frogs are found within an area that has been fenced to exclude California red-legged frogs, activities will cease until the authorized biologist moves the California red-legged frog(s).
- 11. If California red-legged frogs are found in a construction area where fencing was deemed unnecessary, work will cease until the authorized biologist moves the California red-legged frogs. The authorized biologist in consultation with USFWS/CDFG will then determine whether additional surveys or fencing are needed. Work may resume while this determination is being made, if deemed appropriate by the authorized biologist and USFWS.
- 12. Any California red-legged frogs found during clearance surveys or otherwise removed from work areas will be placed in nearby suitable, undisturbed habitat. The authorized biologist will determine the best location for their release, based on the condition of the vegetation, access to deep perennial pools, soil, and other habitat features and the proximity to human activities. Clearance surveys shall occur on a daily basis in the work area.

				8.	.0 Mitigation Monitoring Plan
	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 BIOTA (co	nt.)				
LV 4.4-55 (con	t.)				
13.	The authorized biologist will have the authority to stop all activities until appropriate corrective measures have been completed.				
14.	Staging areas for all construction activities will be located on previously disturbed upland areas, if possible, designated for this purpose. All staging areas will be fenced.				
15.	To ensure that diseases are not conveyed between work sites by the authorized biologist or his or her assistants, the fieldwork code of practice developed by the Declining Amphibian Populations Task Force (DAPTF 2009) will be followed at all times.				
4.5 FLOODPL	AIN MODIFICATIONS				
for	rase refer to <b>Section 4.2, Hydrology and Section 4.4, Biota</b> , of this MMP a listing of Program EIR mitigation measures pertaining to flood control.	Please Refer to 4.2, Hydrology, and 4.4, Biota, of	Please Refer to 4.2, Hydrology, and 4.4, Biota,		ease Refer to <b>4.2, Hydrology</b> , d <b>4.4, Biot</b> a, of this MMP
	additional mitigation beyond that contained in Section 4.2, Hydrology	and <b>4.4</b> , <b>Biota</b> , of this MMP			

# changes in the floodplain due to project modifications. **4.6 VISUAL QUALITIES**

In conjunction with the development review process set forth in Chapter 5 SP 4.7-1. of the Specific Plan, all future subdivision maps and other discretionary permits which allow construction shall incorporate the Development Guidelines (Specific Plan Chapter 3) and Design Guidelines (Specific Plan Chapter 4), and the design themes and view considerations listed in the Specific Plan.

and Section 4.4, Biota) is required because no significant impacts to biological resources are anticipated due to the bank stabilization, bridge, or

this MMP

# Applicant

# Plan Check

- 1. LA County Department of Regional Planning
- 2. LA County Department of Regional Planning
- 3. Prior to Approval of Final Maps

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
.6 VISU	AL QUALITIES (cont.)	V			· · · · · · · · · · · · · · · · · · ·
SP 4.7-2.	In design of residential tentative tract maps and site planning of multifamily areas and Commercial and Mixed-Use land use designations along State Route 126 (SR-126), the following Design Guidelines shall be utilized:	Applicant	Plan Check	1. 2.	LA County Department o Regional Planning LA County Department o
•	• Where the elevations of buildings will obstruct the views from SR-126 to the south, the location and configuration of individual buildings, driveways, parking, streets, signs and pathways shall be designed to provide view corridors of the river, bluffs, and the ridge lines south of the river. Those view corridors may be perpendicular to SR-126 or oblique to it in order to provide for views of passengers within moving vehicles on SR-126;			3.	Regional Planning Prior to Approval of Final Subdivision Maps or Site Plans as applicable
	• The Community Park between SR-126 and the Santa Clara River shall be designed to promote views from SR-126 of the river, bluffs and ridge lines to the south of the river;				
	• Residential Site Planning Guidelines set forth in Section 4.3.1 and Residential and Architectural Guidelines set forth in Section 4.4.1 Residential shall be employed to ensure that the views from SR-126 are aesthetically pleasing and that views of the river, bluffs and ridge lines south of the river are preserved to the extent practicable;				
	<ul> <li>Mixed-Use and the Commercial Site Planning Guidelines set forth in Section 4.3.2 and Architectural Guidelines set forth Section 4.4.2 shall be incorporated to the extent practicable in the design of the Riverwood Village Mixed-Use and Commercial land use designations to ensure that the views from SR-126 are aesthetically pleasing and to preserve views of the river, bluffs and ridge lines south of the river; and</li> </ul>				
	<ul> <li>Landscape improvements along SR-126 shall incorporate the Landscape Design Guidelines, set forth in Section 4.6 in order to ensure that the views from SR-126 are aesthetically pleasing and to preserve views of the river, bluffs and ridge lines south of the river.</li> </ul>				

4.7 TRAF	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.8-1.	The applicants for future subdivision maps which permit construction shall be responsible for funding and constructing all on-site traffic improvements except as otherwise provided below. The obligation to construct improvements shall not preclude the applicants' ability to seek local, state, or federal funding for these facilities. (All on-site traffic improvements included as part of the Landmark Village project will be funded and/or constructed by the project applicant.)	Applicant(s)	Bonding of and/or Receipt of Funding and/or Field Verification of Construction	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Issuance of Building Permit
SP 4.8-2.	Prior to the approval of each subdivision map which permits construction, the applicant for that map shall prepare a transportation performance evaluation which shall indicate the specific improvements for all on-site roadways which are necessary to provide adequate roadway and intersection capacity as well as adequate right-of-way for the subdivision and other expected traffic. Transportation performance evaluations shall be approved by Los Angeles County Department of Public Works according to standards and policies in effect at that time. The transportation performance evaluation shall form the basis for specific conditions of approval for the subdivision. (This EIR, Section 4.7, provides the required transportation performance evaluation and, in combination with Section 1.0, Project Description, indicates the on-site roadway improvements necessary to provide adequate capacity.)	Applicant (Traffic Engineer)	Receipt and Review of Transportation Performance Evaluation	1. 2. 3.	LACDPW LACDPW Prior to Approval of Subdivision Maps
SP 4.8-3.	The applicants for future subdivisions shall provide the traffic signals at the 15 locations labeled B through P in Figure 4.8-17, as well as any additional signals warranted by future subdivision design. Signal warrants shall be prepared as part of the transportation performance evaluations noted in Mitigation Measure 4.8-2. (Two of the intersections within the Landmark Village site will be signalized intersections, including the one intersection depicted as signalized by Specific Plan Figure 4.8-17, Long Canyon Road/A Street. This EIR, Section 4.7, in combination with the traffic report presented in Recirculated EIR Appendix 4.7, provides the required signal warrants.)	Applicant (Traffic Engineer)	Installation of Traffic Signals or funding of or bonding of project's share	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Issuance of Occupancy Permits

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.7 TRAF	FIC/ACCESS (cont.)				
SP 4.8-4.	All development within the Specific Plan shall conform to the requirements of the Los Angeles County Transportation Demand Management (TDM) Ordinance. (The Landmark Village project would conform to the County's TDM Ordinance.)	Applicant (Traffic Engineer)	Subdivision Review	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Final Map Approval and/or approval of improvement plans
SP 4.8-5.	The applicants for all future subdivision maps which permit construction shall consult with the local transit provider regarding the need for, and locations of, bus pull-ins on highways within the Specific Plan area. All bus pull-in locations shall be approved by the Department of Public Works, and approved bus pull-ins shall be constructed by the applicant. (Final locations of bus pull-ins will be coordinated with the local transit provider and the Department of Public Works and constructed in conjunction with the project.)	Applicant (Traffic Engineer)	Verification of Consultation with Transit Providers  Review of bus pull-in locations	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Final Map Approval and/or approval of improvement plans
SP 4.8-6.	Prior to the recordation of the first subdivision map which permits construction, the applicant for that map shall prepare a transportation performance evaluation which shall determine the specific improvements needed to each off-site arterial and related costs in order to provide adequate roadway and intersection capacity for the expected Specific Plan and General Plan buildout traffic trips. The transportation performance evaluation shall be based on the Master Plan of Highways in effect at that time and shall be approved by the Los Angeles County Department of Public Works. The applicant shall be required to fund its fair share of improvements to these arterials, as stated on Table 4.8-18. The applicants total funding obligation shall be equitably distributed over the housing units and non-residential building square footage (i.e., Business Park, Visitor-Serving, Mixed-Use, and Commercial) in the Specific Plan, and shall be a fee to be paid to the County and/or the City at each building permit. For off-site areas within the County unincorporated area, the applicant may construct improvements for credit against or in lieu of paying the fee. ( <i>This EIR</i> , <i>Section 4.7</i> , provides the referenced transportation performance evaluation, including a determination of the improvements necessary to each off-site arterial, as well as appropriate fair-share funding requirements.)	Applicant(s)	Payment of Fee  Determination   of fair share   funding   obligation and fee structure for    off-site   improvements	1. 2. 3.	LACDPW  Prior to Recordation of the First Subdivision Map

4.7 TRAF	Mitigation Measures/Conditions of Approval FIC/ACCESS (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.8-7.	Each future performance evaluation which shows that a future subdivision map will create significant impacts on SR-126 shall analyze the need for additional travel lanes on SR-126. If adequate lane capacity is not available at the time of subdivision, the applicant of the subdivision shall fund or construct the improvements necessary to serve the proposed increment of development. Construction or funding of any required facilities shall not preclude the applicant's ability to seek state, federal, or local funding for	Applicant(s)	Receipt and Review of Transportation Performance Evaluation	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Recordation of Final Tract Map
	these facilities. (The future performance evaluation presented in this EIR, Section 4.7, determined that the Landmark Village project would cause a significant impact at the SR-126/I-5 interchange at buildout and would be responsible for its fair share of the improvements to this interchange.). (This improvement has since been completed.)		Applicant Funding of or bonding of Fair Share of Improvements		
SP 4.8-8.	Project-specific environmental analysis for future subdivision maps which allow construction shall comply with the requirements of the Congestion Management Program in effect at the time that subdivision map is filed. (The future performance evaluation presented in this EIR, Section 4.7, complies with the requirements of the Congestion Management Program presented in effect.)	Applicant	Review of future environmental analysis	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to certification of future environmental documents

		Party			T. (
		Responsible for		1.	Enforcement Agency
		Implementing	Monitoring	2.	Monitoring Agency
	Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase
i.7 TRAF	FIC/ACCESS (cont.)				
SP 4.8-9.	Prior to the recordation of the first subdivision map which permits	Applicant (Traffic	Receipt and	1.	LACDPW
	construction, the applicant for that map shall prepare a transportation evaluation including all of the Specific Plan land uses which shall determine	Engineer)	Review of Transportation	2.	LACDPW
	evaluation including an of the specific Flant land does which shall determine		Transportation	2	Prior to Possardation of th

the specific improvements needed to the following intersections with SR-126 in the City of Fillmore and community of Piru in Ventura County: A, B, C, D, and E Streets, Old Telegraph, Olive, Central, Santa Clara, Mountain View, El Dorado Road, and Pole Creek (Fillmore), and Main/Torrey and Center (Piru). The related costs of those intersection improvements and the project's fair share shall be estimated based upon the expected Specific Plan traffic volumes. The transportation performance evaluation shall be based on the Los Angeles County Master Plan of Highways in effect at that time and shall be approved by the Los Angeles County Department of Public Works. The applicant's total funding obligation shall be equitably distributed over the housing units and non-residential building square footage (i.e., Business Park, Visitor Center, Mixed Use, and Commercial) in the Specific Plan, and shall be a fee to be paid to the City of Fillmore and the County of Ventura at each building permit. (This EIR, Section 4.7, in combination with the traffic reports presented in Recirculated EIR Appendix 4.7, provides the required transportation evaluation of SR-126 intersections in Ventura County. As discussed in the EIR, Subsection 9.b.(3), buildout of the Newhall Ranch Specific Plan would contribute to potentially significant cumulative impacts at the intersection of Center Street and Telegraph Road (SR-126) in the Ventura County community of Piru. Pursuant to mitigation measure LV-4.7-21, below, the applicant will pay to Ventura County its fair-share of the costs to implement recommended roadway improvements at the Center Street/Telegraph Road intersection. Additionally, as discussed in the EIR, Subsection 9.b.(4), buildout of the Newhall Ranch Specific Plan would contribute to potentially significant cumulative impacts at two intersections in the Ventura County City of Fillmore. Pursuant to Mitigation Measure LV-4.7-20, the applicant will pay \$300,000 to the City of Fillmore as its agreed-upon fair-share of the costs to construct transportation-related improvements deemed necessary by the City of Fillmore.)

) Review of Transportation Performance Evaluation

Review of 2. LACDPW

3. Prior to Recordation of the First Subdivision Map; Payment of Fee Prior to Issuance of Building Permits

Payment of Fee

to City of

Fillmore or

County of

Ventura

4.7 TRAF	Mitigation Measures/Conditions of Approval FIC/ACCESS (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.8-10.	The Specific Plan is responsible to construct or fund its fair-share of the intersections and interchange improvements indicated on Table 4.8-18. Each future transportation performance evaluation required by Mitigation Measure 4.8-2 which identifies a significant impact at these locations due to subdivision map-generated traffic shall address the need for additional capacity at each of these locations. If adequate capacity is not available at the time of subdivision map recordation, the performance evaluation shall determine the improvements necessary to carry Specific Plan generated traffic, as well as the fair share cost to construct such improvements. If the future subdivision is conditioned to construct a phase of improvements which results in an overpayment of the fair-share cost of the improvement, then an appropriate adjustment (offset) to the fees paid to Los Angeles County and/or City of Santa Clarita pursuant to Mitigation Measure 4.8-6 above shall be made. ( <i>The transportation performance evaluation presented in this EIR, Section 4.7, fulfills the requirements of this Specific Plan mitigation measure relative to Landmark Village.</i> )	Applicant	Field Verification of Construction or Receipt of Fair Share Funding or Bonding	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Issuance of Occupancy Permits
SP 4.8-11.	The applicant of the Newhall Ranch Specific Plan shall participate in an I-5 developer fee program, if adopted by the Board of Supervisors for the Santa Clarita Valley. (The Board of Supervisors has not adopted a developer fee program for the Santa Clarita Valley. However, the applicant will participate in funding its fair share of mainline improvements in accordance with Mitigation Measures LV-4.7-17through LV-4.7-20.)	Applicant	Field Verification of Construction or Receipt of Fair Share Funding or Bonding	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW
SP 4.8-12.	The applicant of the Newhall Ranch Specific Plan shall participate in a transit fee program, if adopted for the entire Santa Clarita Valley by Los Angeles County and City of Santa Clarita. ( <i>The applicant will be required to pay the applicable transit fees in place at the time of building permit issuance.</i> )	Applicant	Field Verification of Construction or Receipt of Fair Share Funding or Bonding	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Issuance of Occupancy Permits

4.7 TRAFI	Mitigation Measures/Conditions of Approval FIC/ACCESS (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.8-13.	Prior to the approval of each subdivision map which permits construction, the applicant for that map shall prepare a traffic analysis approved by the Los Angeles County Department of Public Works. The analysis will assess project and cumulative development (including an existing plus cumulative development scenario under the County's Traffic Impact Analysis Report Guidelines (TIA) and its Development Monitoring System (DMS)). In response to the traffic analysis, the applicant may construct off-site traffic improvements for credit against, or in lieu of paying, the mitigation fees described in Mitigation Measure 4.8-6, above. If future subdivision maps are developed in phases, a traffic study for each phase of the subdivision map may be submitted to determine the improvements needed to be constructed with that phase of development. ( <i>The traffic analysis presented in this EIR</i> , <i>Section 4.7</i> , <i>fulfills the requirements of this Specific Plan mitigation measure</i> .)	Applicant(s) (Project Traffic Engineer)	Receipt and Review of TIA and DMS Traffic Analysis  Applicant Funding of or bonding of Fair Share of Improvements	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Recordation of the Final Tract Map
LV-4.7-1.	The project applicant shall construct all on-site local roadways and intersections to County of Los Angeles codes and regulations, unless provided otherwise on the Vesting Tentative Tract Map when approved	Applicant (Traffic Engineer)	Field Verification of Construction	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Recordation of the Final Tract Map
LV 4.7-2.	The main access for Landmark Village will be provided from SR-126 via the existing intersections of Wolcott Way and Chiquito Canyon Road. Future phases of the NRSP will provide access to and from south via Long Canyon Road. Unless an updated long range study is prepared which demonstrates that the intersections will adequately handle the area buildout traffic as at grade intersections, adequate road right of way shall be reserved for future grade separated interchanges at these two locations, as approved in the NRSP.	Applicant (Traffic Engineer)	Field Verification of Construction	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to recordation of the Final Tract Map

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.7 TRAF	FIC/ACCESS (cont.)	J			
LV 4.7-3.	80. Wolcott/SR-126 – Prior to occupancy of the first dwelling unit, the project applicant shall: (i) re-stripe the southbound shared left-turn/through lane to an exclusive through lane (resulting in 1 southbound left-turn lane, 1 southbound through lane, and 1 southbound right turn lane); (ii) add a northbound left turn lane and 2 northbound right turn lanes (resulting in 1 northbound left turn lane, 1 northbound through lane and 2 northbound right turn lane); (iii) add an eastbound right turn lane (resulting in 1 eastbound left turn lane, 2 eastbound through lanes, and 1 eastbound right turn lane); and (iv) add a second westbound left turn lane (resulting in 2 westbound left turn lanes, 2 westbound through lanes, and 1 westbound right turn lane). Said improvements are to be completed at their ultimate design locations and operational to the satisfaction of the County of Los Angeles Department of Public Works (Department of Public Works) concurrently with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed. Signals shall be modified to the satisfaction of the Department of Public Works.	Applicant (Traffic Engineer)	Field Verification of Construction	1. 2. 3.	LACDPW  Concurrent with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed
LV 4.7-4.	<ul> <li>The Landmark Village traffic study is based on the Santa Clarita Valley Consolidated Traffic Model and assumes the following roadway improvements will be in place with Phase I of the project. In accordance with the County of Los Angeles Department of Public Works Traffic Impact Analysis Report Guidelines (TIARG), the following improvements shall be made a condition of approval for the project to be completed at their ultimate design locations and operational to the satisfaction of the Department of Public Works concurrently with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed:</li> <li>Reconstruct the Golden State (I-5) Freeway/SR-126 Freeway interchange by adding access to eastbound SR-126 from southbound I-5, access to southbound I-5 from westbound SR-126, direct access to northbound I-5 from westbound SR-126, and widening bridge to accommodate 8 lanes. [This measure has been completed.]</li> <li>Construct Newhall Ranch Road segment between Vanderbilt Way and Copper Hill Drive/Rye Canyon Road. [This measure has been completed.]</li> </ul>	Applicant (Traffic Engineer)	Field Verification of Construction	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW  Concurrent with Phase I and concurrent with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed
Impact Scienc	ces, Inc. 8.0-119				Landmark Village Recirculated Draft EIR

4.7 TRAF	Mitigation Measures/Conditions of Approval FIC/ACCESS (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.7-5.	110. Chiquito Canyon/Long Canyon/SR-126 – Prior to occupancy of the 501st dwelling unit or a comparable amount of dwelling units plus commercial square feet (to be determined based on a conversion factor of 2.5 dwelling units per thousand square feet), the project applicant shall add: (i) a northbound left turn lane and a northbound right turn lane (resulting in 1 northbound left turn lane, 1 northbound through lane, and 1 northbound right turn lane); (ii) a southbound left turn lane (resulting in 1 southbound left turn lane and 1 shared southbound through lane/southbound right turn lane); and (iii) a westbound left turn lane (resulting in 1 westbound left turn lane, 2 westbound through lanes, and 1 westbound right turn lane). Said improvements are to be completed and operational to the satisfaction of the Department of Public Works concurrently with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection	Applicant (Traffic Engineer)	Field Verification of Construction	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW  LACDPW  Prior to occupancy of the 501st dwelling unit or a comparable amount of dwelling units plus commercial square feet and concurrent with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed
LV 4.7-6.	loops, if needed.  I-5 Southbound Ramps/SR-126 – Prior to exceeding occupancy of 1,444 dwelling units and 100,000 commercial square feet (or fewer dwelling units and a greater amount of commercial square feet, to be calculated based on a conversion factor of 2.5 dwelling units per thousand square feet of commercial space), the project applicant shall add a third westbound through lane (resulting in 3 westbound through lanes and a free flow westbound right turn lane) to be completed at its ultimate design location and operational to the satisfaction of Public Works concurrently with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed. Signals shall be modified to the satisfaction of the Department of Public Works. [This measure has been completed.]	Applicant (Traffic Engineer)	Field Verification of Construction	1. 2. 3.	LACDPW  Prior to exceeding occupancy of 1,444 dwelling units and 100,000 commercial square feet and concurrent with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed

	Party			
	Responsible for		1.	<b>Enforcement Agency</b>
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

#### 4.7 TRAFFIC/ACCESS (cont.)

LV 4.7-7. 80. Wolcott/SR-126 – Prior to exceeding occupancy of 1,444 dwelling units Applicant (Traffic and 100,000 commercial square feet (or fewer dwelling units and a greater amount of commercial square feet, to be calculated based on a conversion factor of 2.5 dwelling units per thousand square feet of commercial space), the project applicant shall add: (i) a second southbound left turn lane (resulting in 2 southbound left turn lanes, 1 southbound through lane, and 1 southbound right turn lane); (ii) a second eastbound left turn lane and a third eastbound through lane (resulting in 2 eastbound left turn lanes, 3 eastbound through lanes, and 1 eastbound right turn lane); and (iii) a third westbound through lane (resulting in 2 westbound left turn lanes, 3 westbound through lanes, and 1 westbound right turn lane). Said improvements are to be completed at their ultimate design locations and operational to the satisfaction of the Department of Public Works concurrently with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed. Signals shall be modified to the satisfaction of the Department of Public Works. (While the Project Applicant is required by this measure to construct each of the designated improvements, the Landmark Village project's fair-share responsibility for the improvements identified in this mitigation measure is 62.1 percent [Phase 1, 12.2 percent; Phase 2, 19.3 percent; and, Project Buildout, 30.6 percent], with the exception of the third eastbound through lane required as part of improvement (ii); the project's fair-share for that improvement is 100%. This fair-share information is provided to facilitate any future action by the Project applicant to seek participatory funding from other development unrelated to the Landmark Village project.)

Engineer)

Field Verification of Construction

- 1. LACDPW
- LACDPW
- 3. Prior to exceeding occupancy of 1,444 dwelling units and 100,000 commercial square feet and concurrent with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed

	Party			
	Responsible for		1.	<b>Enforcement Agency</b>
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase
# TD A FFIC/A COFCC (	<u> </u>			

#### 4.7 TRAFFIC/ACCESS (cont.)

110. Chiquito Canyon/Long Canyon Road/SR-126 – Prior to exceeding Applicant (Traffic LV-4.7-8. occupancy of 1,444 dwelling units and 100,000 commercial square feet (or fewer dwelling units and a greater amount of commercial square feet, to be calculated based on a conversion factor of 2.5 dwelling units per thousand square feet of commercial space), the project applicant shall add: (i) a second northbound through lane, and a second northbound right turn lane (resulting in 1 northbound left turn lane, 2 northbound through lanes, and 2 northbound right turn lanes); (ii) convert the southbound shared through lane/right-turn lane to a southbound through lane and add a southbound right turn lane (resulting in 1 southbound left turn lane, 1 southbound through lane, and 1 southbound right turn lane); (iii) add an eastbound right turn lane (resulting in 1 eastbound left turn lane, 2 eastbound through lanes, and 1 eastbound right turn lane); and (iv) add a second westbound left turn lane (resulting in 2 westbound left turn lanes, 2 westbound through lanes, and 1 westbound right turn lane). Signals shall be modified to the satisfaction of the Department of Public Works. Alternatively, the project applicant shall construct a grade separated crossing to the satisfaction of the County of Los Angeles Department of Public Works. Said improvements shall be completed at their ultimate design locations and operational to the satisfaction of Public Works concurrently with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed.

# Engineer)

Field Verification of Construction

- 1. LACDPW
- LACDPW
- Prior to exceeding occupancy of 1,444 dwelling units and 100,000 commercial square feet and concurrent with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed

4.7 TRAF	Mitigation Measures/Conditions of Approval FIC/ACCESS (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.7-9.	7. I-5 SB Ramps/SR-126 – The project applicant shall fund its fair share of the cost to add: (i) a fourth southbound lane (resulting in 2 southbound left-turn lanes, 1 shared southbound left turn lane/southbound right turn lane, and 1 dedicated southbound right turn lane); (ii) a third and fourth eastbound through lane (resulting 4 four eastbound through lanes and 1 free flow eastbound right turn lane); and (iii) a fourth westbound through lane (resulting in 4 westbound through lanes and 1 free flow westbound right turn lane). Signals shall be modified to the satisfaction of the Department of Public Works. (Project share = 38.3 percent. The project may elect to pay by phase as each phase gets recorded: Phase I= 8.3 percent, Phase II= 8.1 percent and Phase III= 21.9 percent). Said improvements shall be completed at their ultimate design locations and operational to the satisfaction of Public Works concurrently with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed. [This measure, with the exception of striping a fourth westbound through lane and striping a shared southbound left-turn/right-turn lane, has been completed.]	Applicant	Receipt of Fair Share Funding or Bonding	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW  Concurrent with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed
LV 4.7-10.		Applicant	Receipt of Fair Share Funding or Bonding	1. 2. 3.	LACDPW  Concurrent with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed

4.7 TRAFE	Mitigation Measures/Conditions of Approval FIC/ACCESS (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.7-11.	81, 82, 83, and 94. Commerce Center/SR-126 – The project applicant shall fund its fair share of the cost to construct a Grade Separated Interchange. (Project Share = 33.8 percent. The project may elect to pay by phase as each phase gets recorded: Phase I= 6.6 percent, Phase II= 9.1 percent and Phase III= 18.1 percent).	Applicant	Receipt of Fair Share Funding or Bonding	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW  LACDPW  Concurrent with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed
LV 4.7-12.	110. Chiquito Canyon/Long Canyon Road/SR-126 – The project applicant shall fund its fair share of the cost to add: (i) a second northbound left turn lane (resulting in 2 northbound left turn lanes, 2 northbound through lanes and 2 northbound right turn lanes); (ii) a second southbound left turn lane, and second and third southbound through lanes (resulting in 2 southbound left turn lanes, 3 southbound through lanes and 1 southbound right turn lane); (iii) a second eastbound left turn lane and a third eastbound through lane (resulting in 2 eastbound left turn lanes, 3 eastbound through lanes, and 1 eastbound right turn lane); and (iv) a third westbound through lane (resulting in 2 westbound left turn lanes, 3 westbound through lanes, and 1 westbound right turn lane) Alternatively, the project applicant shall construct a grade separated crossing to the satisfaction of the County of Los Angeles Department of Public Works (Project Share = 62 percent. The project applicant may elect to pay its fair-share by phase as each phase is recorded: Phase I= 3 percent, Phase II= 16 percent and Phase III= 43 percent). Said improvements shall be completed at their ultimate design locations and operational to the satisfaction of Public Works concurrently with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed.	Applicant	Receipt of Fair Share Funding or Bonding	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW  Concurrent with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.7 TRAFFIC/ACCESS (cont.)				
LV 4.7-13. Applicable transit mitigation fees shall be paid at the time of building permit issuance, unless modified by an approved transit mitigation	Applicant	Payment of Transit	1. 2.	LACDPW LACDPW
agreement.		Mitigation Fees	3.	Concurrent with Building Permit Issuance
LV 4.7-14. Prior to the commencement of project construction activities, the applicant	Applicant (Traffic	Field	1.	LACDPW
shall institute construction traffic management controls in accordance with	Engineer)	Verification of Installation	2.	LACDPW
the California Department of Transportation (Caltrans) traffic manual. These traffic management controls shall include measures determined on the basis of site-specific conditions including, as appropriate, the use of construction signs (e.g., "Construction Ahead") and delineators, and private driveway and cross-street closures.		nistanation	3.	Concurrent with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed

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	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase					
4.7 TRAFI	FIC/ACCESS (cont.)	J								
LV 4.7-15.	Traffic signals shall be designed and installed or designed and funded, as specified below, at each of the intersections listed below. The design and the construction of the traffic signals shall be the sole responsibility of the project. The signals shall be completed at their ultimate design locations and operational to the satisfaction of Public Works concurrently with the installation of the curb, gutter, the first lift of asphalt pavement, and the temporary traffic detection loops, if needed, and prior to the development milestones described below:	Applicant (Traffic Engineer)	Design and Installation of traffic signals	1. 2. 3.	LACDPW  LACDPW  Concurrent with the installation of the curb, gutter, the first lift of asphalpavement, and the temporary traffic detection					
	Phase I: Wolcott Way at Henry Mayo Drive (SR-126) (signal modification), prior to the first lift of paving on Wolcott Way or SR-126, whichever comes first;				loops, if needed					
	Phase II: Chiquito Canyon Road and Long Canyon Road (Future) at Henry Mayo Drive (SR-126) (design and install), prior to the first lift of paving on Chiquito or SR-126, whichever comes first;									
	Phase II: School West Driveway at "A" Street (TT 53108) (design and install), prior to rough grade certification for the school lot (Lot 309); Additionally, final school/park site plans and detailed street signing and striping plans for along the school/park frontages, as well as the signal plan for the traffic signal, should be prepared and submitted to Public Works' Traffic and Lighting Division for review and approval;									
	Phase II: School/Park East Driveway at "A" Street (TT 53108), the project applicant shall prepare the traffic signal design plans and secure adequate funds with the Los Angeles County Department of Public Works for the full construction of the traffic signal. The intersection shall be monitored for the installation of the signal once the school is fully occupied with 750 students; and,									
	Phase III: Long Canyon Road at "Y" Street and "A" Street (TT 53108) (design and install), prior to the issuance of the certificate of occupancy for									

building(s) on the fire station.

4.7 TRAFF	Mitigation Measures/Conditions of Approval FIC/ACCESS (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.7-16.	The developer shall use its best efforts to coordinate with the Castaic Union School District (CUSD) in the development of the school's traffic circulation plan and drop-off/pick-up procedures. The Traffic and Lighting Division recommends that a mechanism for enforcement and levying of noncompliance penalties be included in the plan. The traffic circulation plan should include the distribution of informational packets containing the approved drop-off/pick-up procedures to the parents/guardians of students of the school, and trip reduction strategies such as carpooling and increased bus operations, with specific average vehicle ridership goals for students and staff members, to minimize traffic generation in the area.	Applicant (Traffic Engineer)	Approval of traffic circulation plan	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Issuance of Occupancy Permit for the elementary school
LV 4.7-17.	The project applicant shall contribute its fair-share of the costs of adding one high occupancy vehicle ("HOV") lane in each direction to the segment of I-5 between Rye Canyon Road and Magic Mountain Parkway consistent with the percentages shown in <b>Table 4.7-34</b> of this EIR.	Applicant	Receipt of Fair Share Funding or Bonding	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Recordation of the Final Tract Map
LV 4.7-18.	The project applicant shall contribute its fair-share of the costs of adding one HOV lane in each direction to the segment of I-5 between Magic Mountain Parkway and Valencia Boulevard consistent with the percentages shown in <b>Table 4.7-34</b> of this EIR.	Applicant	Receipt of Fair Share Funding or Bonding	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW  LACDPW  Prior to Recordation of the Final Tract Map
LV 4.7-19.	The project applicant shall contribute its fair-share of the costs of adding one HOV lane in each direction to the segment of I-5 between Valencia Boulevard and McBean Parkway consistent with the percentages shown in <b>Table 4.7-34</b> of this EIR.	Applicant	Receipt of Fair Share Funding or Bonding	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Recordation of the Final Tract Map
LV 4.7-20.	The project applicant shall contribute its fair-share of the costs of adding one HOV lane in each direction to the segment of I-5 between Pico Canyon Road/Lyons Avenue and Calgrove Avenue consistent with the percentages shown in <b>Table 4.7-34</b> of this EIR.	Applicant	Receipt of Fair Share Funding or Bonding	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Recordation of Final Tract Map

4.7 TRAFF	Mitigation Measures/Conditions of Approval FIC/ACCESS (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.7-21.	Concurrent with issuance of the first building permit for Landmark Village, the project applicant shall submit a one-time payment of \$300,000 to the City of Fillmore (City) in Ventura County to fund transportation-related improvements in the City consistent with the March 2000 agreement entered into between The Newhall Land and Farming Company and the City. ( <i>This measure implements in part the provisions of Specific Plan mitigation measure SP</i> 4.8-9.)	Applicant	Payment of Fees	1. 2. 3.	LACDPW  LACDPW  Concurrent with first  Landmark Village building  permit
LV-4.7-22.	Concurrent with the issuance of each Newhall Ranch Specific Plan building permit, the project applicant shall pay to the County of Ventura that development's pro-rata share of the entire Newhall Ranch Specific Plan's fair-share (nine percent, or one percent in the case of Landmark Village [130 ADT of 11,000]) of the costs to implement the following roadway improvements at the intersection of Center Street and Telegraph Road (SR-126) in the Ventura County community of Piru: (1) Re-stripe the Center Street southbound approach lane resulting in separate left and right turn lanes; (2) Add a westbound right turn deceleration lane to Telegraph Road; and (3) Install a traffic signal at the intersection when warranted. ( <i>This measure implements in part the provisions of Specific Plan mitigation measure SP</i> 4.8-9.)	Applicant	Payment of Fees	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW  Concurrent with first building permit
4.8 NOISE					
SP 4.9-1.	All construction activity occurring on the Newhall Ranch Specific Plan site shall adhere to the requirements of the <i>County of Los Angeles Construction Equipment Noise Standards</i> , County of Los Angeles Ordinance No. 11743, §12.08.440 as identified in Table 4.9-3.	Applicant (Construction Contractor)	Include Measure in Specifications Field	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Department of Health Services LACDPW, Building and Safety During Grading and
			Verification With Noise Monitor		Construction Activities

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.8 NOISI	E (cont.)				
SP 4.9-2.	Limit all construction activities near occupied residences to between the hours of 6:30 AM and 8:00 PM, and exclude all Sundays and legal holidays pursuant to County Department of Public Works, Construction Division standards.	Applicant (Construction Contractor)	Include Measure in Specifications	<ol> <li>2.</li> </ol>	LA County Department of Health Services LACDPW, Building and Safety
			Field Verification	3.	During Grading and Construction Activities
SP 4.9-3.	When construction operations occur adjacent to occupied residential areas, implement appropriate additional noise reduction measures that include changing the location of stationary construction equipment, shutting off idling equipment, notifying adjacent residences in advance of construction work, and installing temporary acoustic barriers around stationary	Applicant (Construction Contractor)	Include Measure in	1.	LA County Department of Health Services
			Specifications  Field  Verification  and	2.	LACDPW, Building and Safety
	construction noise sources.			3.	During Grading and Construction Activities
			Verification that Adjacent Residents Were Notified		
SP 4.9-4.	Locate construction staging areas on site to maximize the distance between staging areas and occupied residential areas.	Applicant (Construction Contractor)	Include Measure in	1.	LA County Department of Health Services
			Specifications	2.	LACDPW, Building and Safety
			Field Verification	3.	During Grading and Construction Activities

4.8 NOIS	Mitigation Measures/Conditions of Approval E (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.9-5.	Where new single family residential buildings are to be constructed within an exterior noise contour of 60 dB(A) (decibels measured on an A-weighted scale) CNEL (Community Noise Equivalent Level) or greater, or where any multi-family buildings are to be constructed within an exterior noise contour of 65 dB(A) CNEL or greater, an acoustic analysis shall be completed prior to approval of building permits. The acoustical analysis shall show that the building is designed so that interior noise levels resulting from outside sources will be no greater than 45 dB(A) CNEL.	Applicant	Receipt and Review of Acoustical Analysis	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Department of Health Services LACDPW, Building and Safety Prior to the Issuance of Building Permits
SP 4.9-6.	For single-family residential lots located within the 60 dB(A) CNEL or greater noise contour, an acoustic analysis shall be submitted prior to tentative approval of the subdivision. The acoustic analysis shall show that exterior noise in outdoor living areas (e.g., back yards, patios, etc.) will be reduced to 60 dB(A) CNEL or less. ( <i>The noise impacts analysis presented in this EIR Section 4.8, and the accompanying noise calculations presented in Appendix 4.8, provide the acoustic</i> analysis required by this mitigation measure.)	Applicant	Receipt and Review of Acoustical Analysis	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Department of Health Services LACDPW, Building and Safety Prior to Tentative Approval of Subdivision
SP 4.9-7.	For multi-family residential lots located within the 65 dB(A) CNEL or greater noise contour, an acoustic analysis shall be submitted prior to tentative approval of the subdivision. The acoustic analysis shall show that exterior noise in outdoor living areas (e.g., back yards, patios, etc.) will be reduced to 65 dB(A) CNEL or less. (The noise impacts analysis presented in this EIR Section 4.8, and the accompanying noise calculations presented in Appendix 4.8, provide the acoustic analysis required by this mitigation measure.)	Applicant	Receipt and Review of Acoustical Analysis	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Department of Health Services LACDPW, Building and Safety Prior to Tentative Approval of Subdivision
SP 4.9-8.	For school sites located within the 70 dB(A) CNEL or greater noise contour, an acoustic analysis shall be submitted prior to tentative approval of the subdivision. The acoustic analysis shall show that noise at exterior play areas will be reduced to 70 dB(A) CNEL or less. (The noise impacts analysis presented in this EIR Section 4.8, and the accompanying noise calculations presented in Appendix 4.8, provide the acoustic analysis required by this mitigation measure.)	Applicant	Receipt and Review of Acoustical Analysis	<ol> <li>2.</li> <li>3.</li> </ol>	Health Services LACDPW, Building and Safety

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.8 NOISI	E (cont.)				
SP 4.9-9.	All residential air conditioning equipment installed within the Newhall Ranch Specific Plan site shall adhere to the requirements of the <i>County of Los</i>	Building Contractor	Field Verification	1.	LA County Department of Health Services
	Angeles Residential Air Conditioning and Refrigeration Noise Standards, County of Los Angeles Ordinance No. 11743, §12.08.530.			2.	LACDPW, Building and Safety
			3.	Prior to the Issuance of Occupancy Permits	
SP 4.9-10.	All stationary and point sources of noise occurring on the Newhall Ranch Specific Plan site shall adhere to the requirements of the County of Los	pecific Plan site shall adhere to the requirements of the County of Los Operators within Verification ngeles Ordinance No. 11743, §12.08.390 as identified in Table 4.9-2, project ounty of Los Angeles Exterior Noise Standards for Stationary and Point	Field Verification	1.	LA County Department of Health Services
	County of Los Angeles Exterior Noise Standards for Stationary and Point		project	oject 2	2.
	Noise Sources.			3.	During Life of Project
SP 4.9-11.	Loading, unloading, opening, closing, or other handling of boxes, crates, containers, building materials, garbage cans or similar objects between the	Future Owners/ Operators within project	perators within Verification	1.	LA County Department of Health Services
	hours of 10:00 PM and 6:00 AM in such a manner as to cause a noise disturbance is prohibited in accordance with the County of Los Angeles			2.	LACDPW, Building and Safety
	Ordinance No. 11743, §12.08.460.			3.	During Life of Project
SP 4.9-12.	shall be located away from adjacent residential areas, or provide attenuation	Applicant	Plan Check	1.	LA County Department of Health Services
	so that noise levels at residential uses do not exceed the standards identified in §12.08.460 of the Ordinance No. 11743.	Field Verificatio	Field Verification	2.	LACDPW, Building and Safety
			vermeauon	3.	Prior to Approval of Final Maps or improvement/building plans and Verify Prior to Issuance of Occupancy Permits

4.8 NOISI	Mitigation Measures/Conditions of Approval E (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase		
SP 4.9-14.	After the time that occupancy of uses on the Newhall Ranch Specific Plan site occurs, AND when noise levels at the Travel Village RV Park reach 70 dB(A) CNEL at locations where recreational vehicles are inhabited, the applicant shall construct a noise abatement barrier to reduce noise levels at the RV Park to 70 dB(A) CNEL or less.	Applicant	Receipt and Review of Acoustical Analysis	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Department of Health Services LACDPW, Building and Safety Upon Occupancy of Uses on		
		Field Verification		Newhall Ranch and if/when noise levels in Travel Village reach 70 dB(A) CNEL			
SP 4.9-15.	permits of Residential, Mixed-Use, Commercial, and Business Park land uses (Project) shall pay to the Santa Clara Elementary School District, prior	Applicants for all Building Permits	Payment to Santa Clara Elementary	Santa Clara Elementary	Santa Clara Elementary	1. 2.	LACDRP  LACDPW, Building and Safety
	to issuance of building permits, the project's pro rata share of the cost of a sound wall to be located between SR-126 and the Little Red School House. The project's pro rata share shall be determined by multiplying the estimated cost of the sound wall by the ratio of the project's estimated contribution of average daily trips on SR-126 (ADT) at the Little Red School House (numerator) to the total projected cumulative ADT increase at that location (denominator). The total projected cumulative ADT increase shall be determined by subtracting the existing trips on SR-126 from the projected cumulative trips as shown in Table 1 of Topical Response 5 – Traffic Impacts to State and Local Roads in Ventura County after adding the total Newhall Ranch ADT traveling west of the City of Fillmore. (Prior to the issuance of building permits for Landmark Village, the project applicant shall calculate and pay to the Santa Clara Elementary School District the pro-rata share of the cost to construct the subject sound wall.) See, EIR Section 4.5, which determined that the Landmark Village project at buildout in 2010 would generate 105 ADTs on SR-126 at the Little Red School House (EIR Table 4.7-22). Section 4.5 also determined that the 2010 ADT on SR-126 at the Little Red School House would be 35,000 (EIR Table 4.7-22).		School District	3.	Upon Issuance of Building Permits		

		Party		1	Enforcement Assesses
		Responsible for Implementing	Monitoring	1. 2.	Enforcement Agency Monitoring Agency
	Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase
4.8 NOISE		U			
SP 4.9-16.	Despite the absence of a significant impact, the applicant for all building	Applicants for all	Payment to	1.	LACDRP
	permits of Residential, Mixed-Use, Commercial and Business Park land uses (Project) shall participate on a fair-share basis in noise attenuation programs developed and implemented by the City of Moorpark to attenuate vehicular	Building Permits	City of Moorpark	2.	LACDPW, Building and Safety
	noise on SR-23 just north of Casey Road for the existing single-family homes which front SR-23. The mitigation criteria shall be to reduce noise levels to satisfy state noise compatibility standards. The project's pro rata share shall be determined by multiplying the estimated cost of attenuation by the ratio of the project's estimated contribution of average daily trips on SR-23 (ADT) north of the intersection of SR-23 and Casey Road (numerator) to the total projected cumulative ADT increase at that location (denominator). The total projected cumulative ADT increase shall be determined by subtracting the existing trips on SR-23 north of Casey Road from the projected cumulative trips as shown in <b>Topical Response 5 – Traffic Impacts to State and Local Roads in Ventura County</b> after adding the total Newhall Ranch ADT traveling south of the City of Fillmore. (Prior to the issuance of building permits for Landmark Village, the project applicant shall calculate and pay to the City of Moorpark noise attenuation program the project's pro rata share of the estimated cost of attenuation.) See, EIR Section <b>4.5</b> , which determined that the Landmark Village project at buildout in 2010 would generate 10 ADTs on SR-23 north of Casey Road (EIR <b>Table 4.7-22</b> ). <b>Section 4.5</b> also determined that the 2010 ADT on SR-23 at north of Casey Road would be 8,000 (EIR <b>Table 4.7-22</b> ).			3.	Upon Issuance of Building Permits
LV 4.8-1.	The project applicant, or its designee, shall not undertake construction activities that can generate noise levels in excess of the County's Noise	Applicant (Construction	Include Measure in	1.	LA County Department of Health Services
	Ordinance on Sundays or legal holidays.	Contractor) Specificati	Specifications	2.	LACDPW, Building and Safety
			Field Verification With Noise Monitor	3.	During Grading During Construction Activities

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.8 NOIS	E (cont.)				
occupied residences, and if it is determined by Cour construction site inspections that the construction equ	When construction operations occur in close proximity to on- or off-site occupied residences, and if it is determined by County staff during routine construction site inspections that the construction equipment could generate a noise level at the residences that would be in excess of the Noise	Applicant (Construction Contractor)	Field Verification With Noise Monitor	<ol> <li>2.</li> </ol>	LA County Department of Health Services LACDPW, Building and Safety
	Ordinance, the project applicant or its designee shall implement appropriate additional noise reduction measures. These measures shall include, among other things, changing the location of stationary construction equipment, shutting off idling equipment, notifying residents in advance of construction work, and installing temporary acoustic barriers around stationary construction noise sources.			3.	During Grading During Construction Activities
LV 4.8-3.	Prior to construction of the utility corridor north of the Travel Village RV Park, the project applicant or its designee shall erect solid construction and	Applicant (Construction	Field Verification	1.	LA County Department of Health Services
	continuous temporary noise barriers south of the utility corridor north of the RV Park without blocking ingress/egress at the Park. Prior to issuance of	orary noise barriers south of the utility corridor north of Contractor and out blocking ingress/egress at the Park. Prior to issuance of Project Acoustic Monitor	With Noise Monitor	2.	LACDPW, Building and Safety
	the construction permit for the utility corridor, a qualified acoustic consultant shall be retained to specify the placement and height of the noise barriers in order to maximize their effectiveness in attenuating noise levels. Construction activities north of the RV Park shall comply with the Los Angeles County Noise Ordinance; stationary construction equipment shall be placed as far away from occupied spaces within the RV Park, and equipment shall not be permitted to idle. A qualified acoustic consultant shall be retained to monitor construction noise once a month at occupied RV spaces to ensure noise levels are in compliance with the County's Noise Ordinance for the duration of the construction.	Consultant)	Monitor	3.	Prior to issuance of a construction permit and during construction of the utility corridor north of the Travel Village RV Park

10 NOTO	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.8 NOIS	E (cont.)				
LV 4.8-4.	To the extent feasible, the project developer shall utilize cast-in-place drilled-hole piles in lieu of pile driving if residential units are constructed within 5,000 feet of the Long Canyon Bridge prior to any pile driving activity.  Pile drilling is an alternate method of pile installation where a hole is drilled	Applicant (Construction Contractor)	Field Verification	<ol> <li>2.</li> </ol>	Health Services LACDPW, Building and Safety
	into the ground up to the required elevations and concrete is then cast into it. The estimated noise level of pile drilling at 50 feet is 80 to 95 dB(A) Equivalent Continuous Noise Level (Leq) compared to 90 to 105 dB(A) Leq of conventional pile driving. Therefore, pile drilling generally produces noise levels approximately 10 to 15 decibels lower than pile driving. (Revisions to the VTTM/Final Site Plan may ultimately require modifications to the mitigation measure and the referenced lotting including the height and location of berms and walls.)			3.	Prior to Issuance of Building Permit
LV 4.8-5.	To mitigate noise impacts on Lots 8 to 12 and Lots 20 to 24 from traffic along "A" Street, the project applicant or its designee shall, prior to	long "A" Street, the project applicant or its designee shall, prior to ccupancy, construct a minimum 6-foot wall along the northern property nes of these lots. (Revisions to the VTTM/Final Site Plan may ultimately require nodifications to the mitigation measure and the referenced lotting including the	Field Verification	1.	LA County Department of Health Services
	occupancy, construct a minimum 6-foot wall along the northern property lines of these lots. (Revisions to the VTTM/Final Site Plan may ultimately require		•	2.	LACDPW, Building and Safety
	height and location of berms and walls.)			3.	Prior to Issuance of Occupancy Permit
LV 4.8-6.	To mitigate noise impacts on Lots 115 to 128, 146 to 152, 188, and 313 from traffic along "A" Street, the project applicant or its designee shall, prior to	Applicant (Construction	Field Verification	1.	LA County Department of Health Services
	occupancy, construct a minimum 5-foot wall along the northern property lines of these lots. The 5-foot wall shall wrap around the entire length of the	a minimum 5-foot wall along the northern property 5-foot wall shall wrap around the entire length of the		2.	LACDPW, Building and Safety
	eastern boundary of Lot 152. (Revisions to the VTTM/Final Site Plan may ultimately require modifications to the mitigation measure and the referenced lotting including the height and location of berms and walls.)			3.	Prior to Issuance of Occupancy Permit

Impact Sciences, Inc.

8.0-135

Landmark Village Recirculated Draft EIR
32-92A

January 2010

<sup>&</sup>lt;sup>1</sup> U.S. Environmental Protection Agency, Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances, December 1971.

4 0 NOIC	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.8 NOIS LV 4.8-7.	To mitigate noise impacts on Lots 325, 326, 349, and 350 (condominiums and apartments east of Wolcott Road) from traffic along SR-126, the project applicant or its designee shall, prior to occupancy, construct a 7-foot berm/solid wall at top of slope along northern edge of Lots 326, 325, 349 and 350, to the northwestern corner of Lot 349. The berm/wall shall be continuous with no breaks or gaps. (Revisions to the VTTM/Final Site Plan may ultimately require modifications to the mitigation measure and the referenced lotting including the height and location of berms and walls.)	Applicant (Construction Contractor)	Field Verification	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Department of Health Services LACDPW, Building and Safety Prior to Issuance of Occupancy Permit
LV 4.8-8.	To mitigate noise impacts on Lots 343 and 377 (condominium) and on Lot 376 (apartment east of Long Canyon Road) from SR-126, the project applicant or its designee shall, prior to occupancy, construct an 8-foot berm/solid wall along the northern edge of Lots 380, 381, 379, and 360. The berm/wall shall be continuous with no openings or gaps. (Revisions to the VTTM/Final Site Plan may ultimately require modifications to the mitigation measure and the referenced lotting including the height and location of berms and	Applicant (Construction Contractor)	Field Verification	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Department of Health Services LACDPW, Building and Safety Prior to Issuance of Occupancy Permit
LV 4.8-9.	walls.) Prior to occupancy of Lot 346 (condominiums west of Wolcott Road), the project applicant or its designee, shall construct an 8-foot berm/solid wall along the eastern boundary of Lot 346 to mitigate delivery truck traffic noise from Lot 347 (mixed use commercial). (Revisions to the VTTM/Final Site Plan may ultimately require modifications to the mitigation measure and the referenced lotting including the height and location of berms and walls.)	Applicant (Construction Contractor)	Field Verification	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Department of Health Services LACDPW, Building and Safety Prior to Issuance of Occupancy Permit

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.8 NOISE (cont.)				
LV-4.8-10. To mitigate noise impacts on Lot 346 (condominiums west of W Road) from SR-126 the project applicant or its designee shall, proccupancy, construct a 10-foot berm/solid wall along the northern ed Lot 346 from its northeastern corner to a point approximately 325 feet west along the lot line. From this point, a 10-foot berm/solid wall shout constructed through Lot 383 (open space) to the edge of the Caltrans of-way where the wall shall continue westerly to the northwestern corner of Copen Space Lot 383. The wall shall be continuous with no openings of (Revisions to the VTTM/Final Site Plan may ultimately require modifications mitigation measure and the referenced lotting including the height and local berms and walls.)	ior to dge of to the hall be right-mer of gaps. s to the	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Department of Health Services, Caltrans LACDPW, Building and Safety Prior to Issuance of Occupancy Permit
LV-4.8-11. Prior to occupancy of Lot 346 (condominiums west of Wolcott Road project applicant or its designee, shall construct an 8-foot berm/solid along the eastern boundary of Lot 346 to mitigate delivery truck traffic from Lot 347 (mixed use commercial). (Revisions to the VTTM/Final Simmay ultimately require modifications to the mitigation measure and the reference including the height and location of berms and walls.)	d wall (Construction contractor) te Plan	Field Verification	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Department of Health Services, Caltrans LACDPW, Building and Safety Prior to Issuance of Occupancy Permit
LV-4.8-12. To mitigate delivery truck and other noises from the commercial west of Long Canyon Road on Lot 354 (apartments west of Long C Road), the project applicant or its designee shall, prior to occup construct an 8-foot berm/solid wall along the eastern perimeter of Lo (Revisions to the VTTM/Final Site Plan may ultimately require modifications mitigation measure and the referenced lotting including the height and local berms and walls.)	anyon (Construction cancy, ot 354.	Field Verification	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Department of Health Services LACDPW, Building and Safety Prior to Issuance of Occupancy Permit

Mitigation Measures/Conditions of Approval 4.8 NOISE (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV-4.8-13. To mitigate noise impacts on Lot 354 (apartments west of Long Canyon Road) from SR-126, the project applicant or its designee shall, prior to occupancy, construct a 9-foot berm/solid wall along the northern boundary of Lot 354, and along the northern 200 feet of the western lot line. To preserve views of the Santa Clara River, 5/8-inch Plexiglas or transparent material with equivalent or better acoustic value may be incorporated into the wall design. In lieu of constructing the 9-foot berm/solid wall, the parcel shall be developed so that frequent use areas, including balconies, are placed toward the interior of the lot and fully shielded from noise from SR-126 by the apartment structure. (Revisions to the VTTM/Final Site Plan may ultimately require modifications to the mitigation measure and the referenced lotting including the height and location of berms and walls.)	Applicant (Construction Contractor)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Department of Health Services LACDPW, Building and Safety Prior to Issuance of Occupancy Permit
LV-4.8-14. To mitigate noise impacts on Lot 376 (apartments east of Long Canyon Road) from delivery truck and other noise from the commercial center proposed east of Long Canyon Road, the project applicant or its designee shall, prior to occupancy, construct an 8-foot berm/solid wall along the western boundary of Lot 376. (Revisions to the VTTM/Final Site Plan may ultimately require modifications to the mitigation measure and the referenced lotting including the height and location of berms and walls.)	Applicant (Project Acoustic Consultant)	Field Verification	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Department of Health Services, Caltrans LACDPW, Building and Safety Prior to Issuance of Occupancy Permit
LV-4.8-15. Residences within mixed-use commercial areas shall be discouraged within 500 feet of the centerline of SR-126. Residences that do occur within mixed use commercial lots shall be set back as far as possible from SR-126, Wolcott Road, Long Canyon Road, and "A" Street in order to minimize the need for acoustic insulation of the units. When the plot plan for the commercial center is complete, acoustic analyses shall be conducted by a qualified acoustic consultant to ensure that interior noise levels of any residences within the commercial center can be feasibly reduced to 45 dB(A).	Applicant (Project Acoustic Consultant)	Receipt and Review of Noise Impact Analysis	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Department of Health Services LACDPW, Building and Safety Prior to Issuance of Commercial Center Building Permit

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV-4.8-16.	Road, and/or "A" Street shall be discouraged from exposure to exterior	Applicant (Project Acoustic	Building Plan Check	1.	LA County Department of Health Services
	noise levels greater than the 60 dB(A) CNEL standard for single-family residences or the 65 dB(A) CNEL standard for multi-family residences through architectural or site design. Alternatively, belonies shall be	Consultant and Construction		2.	LACDPW, Building and Safety
	through architectural or site design. Alternatively, balconies shall be enclosed by solid noise barriers, such as 3/8-inch glass or 5/8-inch Plexiglas to a height specified by a qualified noise consultant.	Contractor)		3.	Prior to Issuance of Building Permit
LV-4.8-17.	All single-family and multi-family structures, including multi-family units incorporated into commercial centers, within 500 feet of SR-126 and all	Applicant	Building Plan Check	1.	LA County Department of Health Services
	residential units with direct lines of sight to SR-126, Wolcott Road, Long Canyon Road, and/or "A" Street shall incorporate the following into the exterior wall that faces onto those roadways:	"A" Street shall incorporate the following into the onto those roadways:  In fixed and operable, shall consist of either double-ouble-paned glass. All windows facing sound waves the mobile source noise shall be manufactured and diffications that prevent any sound from window		2.	LACDPW, Building and Safety
	(a) All windows, both fixed and operable, shall consist of either double-strength glass or double-paned glass. All windows facing sound waves generated from the mobile source noise shall be manufactured and installed to specifications that prevent any sound from window vibration caused by the noise source.			3.	Prior to Issuance of Building Permit
	(b) Doors shall be solid core and shall be acoustically designed with gasketed stops and integral drop seals.				
	(c) If necessitated by the architectural design of a structure, special insulation or design features shall be installed to meet the required interior ambient noise level.				
LV-4.8-18.	Air conditioning units shall be installed to serve all living areas of all residences incorporated into commercial centers, and those with direct lines of sight to SR-126, and/or "A" Street so that windows may remain closed without compromising the comfort of the occupants.	Applicant (Construction	Review of Field verification	1.	LA County Department of Health Services
		Contractor		2.	LACDPW, Building and Safety
				3.	Prior to Issuance of Occupancy Permit

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.9 AIR Q	UALITY				
SP 4.10-1.	The Specific Plan will provide Commercial and Service uses in close Applicant Approval of Proximity to residential subdivisions. (The Landmark Village project provides Commercial and Service Uses in close proximity to residential subdivisions).	1. 2.	LACDRP LACDRP		
		3.	Prior to Tentative Subdivision Map Approvals		
SP 4.10-2.	The Specific Plan will locate residential uses in close proximity to	Applicant	Approval of Tentative Maps	1.	LACDRP
	Commercial uses, Mixed-Uses, and Business Parks. (The Landmark Village project locates residential uses in close proximity to Commercial Uses and Mixed			Tentative Maps	2.
	Uses).		3.	Prior to Tentative Subdivision Map Approvals	
SP 4.10-3.	0 1	Applicant	Final Highway	1.	LACDPW
	Landmark Village project provides for bus pull-ins at designated locations).		Plan Check	2.	LACDPW
				3.	Prior to Tentative Subdivision Map Approvals
SP 4.10-4.	Pedestrian facilities, such as sidewalks, and community regional, and local	Applicant	Submittal of	1.	LACDRP
	trails, will be provided throughout the Specific Plan site. ( <i>Pedestrian facilities</i> , such as sidewalks, bike paths, and trails, will be constructed throughout the		Tentative Maps	2.	LACDRP
	Landmark Village project, with future connections to other on-site and off-site future developments and designated trails).		3.	Prior to Tentative Subdivision Map Approvals	
SP 4.10-5.	Roads with adjacent trails for pedestrian and bicycle use will be provided	Applicant	Submittal of	1.	LACDRP
		Tentative Maps	2.	LACDRP	
	community. (Roads with adjacent trails for pedestrian and bicycle use will be provided throughout the Landmark Village project site with future connections to future developments within Newhall Ranch)			3.	Prior to Tentative Subdivision Map Approvals

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.9 AIR Q	UALITY (cont.)	U			
	The applicant of future subdivisions shall implement all rules and regulations adopted by the Governing Board of the Southern California Air Quality Management District (SCAQMD) which are applicable to the development of the subdivision (such as Rule 402 - Nuisance, Rule 403 - Fugitive Dust, Rule 1113 - Architectural Coatings) and which are in effect at the time of development. The purpose of Rule 403 is to reduce the amount of particulate matter entrained in the ambient air as a result of man-made fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or man-made condition capable of generating fugitive dust such as the mass and remedial grading associated with the project as well as weed abatement and stockpilling of construction materials (i.e., rock, earth, gravel). Rule 403 requires that grading operations either (1) take actions specified in Tables 1 and 2 of the Rule for each applicable source of fugitive dust and take certain notification and record keeping actions; or (2) obtain an approved Fugitive Dust Control Plan. A complete copy of the SCAQMD's Rule 403 Implementation Handbook, which has been included in <b>Appendix 4.10</b> , provides guideline tables to demonstrate the typical mitigation program and record keeping required for grading operations (Tables 1 and 2 and sample record keeping chart). The record keeping is accomplished by onsite construction personnel, typically the construction superintendent.	Applicant	Plan Check  Review and apply applicable rules as part of environmental document	1. 2. 3.	LACDRP LACDRP Prior to Tentative Subdivision Map Approvals
	Each future subdivision proposed in association with the Newhall Ranch Specific Plan shall implement the following if found applicable and feasible for that subdivision.				

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

## 4.9 AIR QUALITY (cont.)

# 4.10-6. (cont.)

#### **GRADING**

- Apply non-toxic soil stabilizers according to manufacturers' specification to all inactive construction areas (previously graded areas inactive for ten days or more).
- b. Replace groundcover in disturbed areas as quickly as possible.
- c. Enclose, cover, water twice daily, or apply non-toxic soil binders according to manufacturers' specifications, to exposed piles (i.e., gravel, sand, dirt) with 5 percent or greater silt content.
- d. Water active sites at least twice daily.
- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.
- Monitor for particulate emissions according to District-specified procedures.
- g. All trucks hauling dirt, sand, soil, or other loose materials are to be covered or should maintain at least two feet of freeboard (i.e., minimum vertical distance between top of the load and the top of the trailer) in accordance with the requirements of California Vehicle Code (CVC) Section 23114.

#### **PAVED ROADS**

- Sweep streets at the end of the day if visible soil material is carried onto adjacent public paved roads (recommend water sweepers with reclaimed water).
- Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.

	Party			
	Responsible for		1.	Enforcement Agency
	<b>Implementing</b>	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

# 4.9 AIR QUALITY (cont.)

# 4.10-6. (cont.)

# **UNPAVED ROADS**

- j. Apply water three times daily, or non-toxic soil stabilizers according to manufacturers' specifications, to all unpaved parking or staging areas or unpaved road surfaces.
- k. Reduce traffic speeds on all unpaved roads to 15 mph or less.
- Pave construction roads that have a traffic volume of more than 50 daily trips by construction equipment, 150 total daily trips for all vehicles.
- m. Pave all construction access roads at least 100 feet on to the site from the main road.
- n. Pave construction roads that have a daily traffic volume of less than 50 vehicular trips.

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.9 AIR QU	JALITY (cont.)	<u> </u>			V
	Prior to the approval of each future subdivision proposed in association with the Newhall Ranch Specific Plan, each of the construction emission reduction measures indicated below (and in Tables 11-2 and 11-3 of the SCAQMD's CEQA Air Quality Handbook, as amended) shall be implemented if found applicable and feasible for that subdivision. Tables of currently applicable measures are provided for reference in EIR Appendix 4.10.  ON-ROAD MOBILE SOURCE CONSTRUCTION EMISSIONS:  a. Configure construction parking to minimize traffic interference.  b. Provide temporary traffic controls when construction activities have the potential to disrupt traffic to maintain traffic flow (e.g., signage, flag person, detours).  c. Schedule construction activities that affect traffic flow to off-peak hours (e.g., between 7:00 PM and 6:00 AM and between 10:00 AM and 3:00 PM).  d. Develop a trip reduction plan to achieve a 1.5 average vehicle ridership (AVR) for construction employees.  e. Implement a shuttle service to and from retail services and food establishments during lunch hours.  f. Develop a construction traffic management plan that includes the following measures to address construction traffic that has the potential to affect traffic on public streets:  — Rerouting construction traffic off congested streets;  — Consolidating truck deliveries; and  — Providing temporary dedicated turn lanes for movement or construction trucks and equipment on and off of the site.  g. Prohibit truck idling in excess of two minutes.		Field Verification and review and include applicable and feasible rules as part of environmental document	1. 2. 3.	LACDRP

	Party			
	Responsible for		1.	Enforcement Agency
	<b>Implementing</b>	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

# 4.9 AIR QUALITY (cont.)

SP 4.10-7. (cont.)

# OFF-ROAD MOBILE SOURCE CONSTRUCTION EMISSIONS:

- h. Use methanol-fueled pile drivers.
- Suspend use of all construction equipment operations during second stage smog alerts.
- j. Prevent trucks from idling longer than two minutes.
- Use electricity from power poles rather than temporary diesel-powered generators.
- Use electricity from power poles rather than temporary gasolinepowered generators.
- Use methanol- or natural gas-powered mobile equipment instead of diesel.
- n. Use propane- or butane-powered on-site mobile equipment instead of gasoline.

SP 4.10-8. The applicant of future subdivisions shall implement all rules and regulations adopted by the Governing Board of the SCAQMD which are applicable to the development of the subdivision (such as Rule 402 – Nuisance, Rule 1102 – Petroleum Solvent Dry Cleaners, Rule 1111 – Oxides of Nitrogen (NO<sub>x</sub>) Emissions from Natural Gas-Fired, Fan-Type Central Furnaces, Rule 1146 – Emissions of Oxides of Nitrogen from Industrial, Institutional, and Commercial Boilers, Steam Generators, and Process Heaters) and which are in effect at the time of occupancy permit issuance.

Applicant Field
Verification
and review and
include
applicable and
feasible rules as
part of
environmental

document

2. LACDRP3. Prior to Tentative Subdivision Map Approvals

1. LACDRP

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.9 AIR QUA		V			
wi rec SC if ap OI	core areas.  Construct on-site or off-site bus stops (e.g., bus turnouts, passenger benches, and shelters).  Construct off-site pedestrian facility improvements, such as overpasses and wider sidewalks.  Include retail services within or adjacent to residential subdivisions.  Provide shuttles to major rail transit centers or multi-modal stations.  Contribute to regional transit systems (e.g., right-of-way, capital improvements, etc.).  Synchronize traffic lights on streets impacted by development.	Applicant	Field Verification and review and include applicable and feasible rules as part of environmental document	1. 2. 3.	LACDRP

				Ū			
	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase		
4.9 AIR QUA	ALITY (cont.)	a de de la companya d					
SP 4.10-9. (d	cont.)	Applicant	Field	1.	LACDRP		
C	Commercial Uses		Verification	2.	LACDRP		
j.	Provide preferential parking spaces for carpools and vanpools and provide 7-foot, 2-inch minimum vertical clearance in parking facilities for vanpool access.		and review and include applicable and	3.	Prior to Tentative Subdivision Map Approval		
k	. Implement on-site circulation plans in parking lots to reduce vehicle queuing.		feasible rules as part of environmental				
1.	Improve traffic flow at drive-throughs by designing separate windows for different functions and by providing temporary parking for orders not immediately available for pickup.		document				
n	n. Provide video-conference facilities.						
n	Set up resident worker training programs to improve job/housing balance.						
S.	. Implement a lunch shuttle service from a worksite(s) to food establishments.						
W	v. Establish a home-based telecommuting program.						
х	. Provide on-site child care and after-school facilities or contribute to off-site development within walking distance.						
у	Require retail facilities or special event centers to offer travel incentives such as discounts on purchases for transit riders.						
z	. Provide on-site employee services such as cafeterias, banks, etc.						
a	a. Establish a shuttle service from residential core areas to the worksite.						
a	b. Construct on-site or off-site bus stops (e.g., bus turnouts, passenger benches, and shelters).						
a	c. Implement a pricing structure for single-occupancy employee parking and/or provide discounts to ride sharers.						
a	d. Include residential units within a commercial project.						
a	e. Utilize parking in excess of code requirements as on-site park-n-ride lots or contribute to construction of off-site lots.						

					3
	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
l.9 AIR QUAI	LITY (cont.)				
4.9 AIR QUAI SP 4.10-9. (co af ag ah. ai.	LITY (cont.)	Applicant	Field Verification and review and include applicable and feasible rules as part of environmental document	1. 2. 3.	LACDRP LACDRP Prior to Tentative Subdivision Map Approvals
aj.	Charge visitors to park.				
ak.	Synchronize traffic lights on streets impacted by development.				
al. am	Reschedule truck deliveries and pickups to off-peak hours.  Set up paid parking systems where drivers pay at walkup kiosk and exit via a stamped ticket to reduce emissions from queuing vehicles.				
an.	Require on-site truck loading zones.				
ao.					
ар.	Require employers not subject to Regulation XV (now Rule 2202) to provide commuter information area.				

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.9 AIR QUALITY (cont.)				
SP 4.10-9. (cont.)				
STATIONARY SOURCE OPERATIONAL EMISSIONS  Residential Uses  br. Use solar or low emission water heaters. bs. Use central water heating systems. bt. Use built-in energy-efficient appliances. bu. Provide shade trees to reduce building heating/cooling needs. bv. Use energy-efficient and automated controls for air conditioners. bw. Use double-paned windows. bx. Use energy-efficient low-sodium parking lot lights. by. Use lighting controls and energy-efficient lighting. bz. Use fuel cells in residential subdivisions to produce heat and electricity. ca. Orient buildings to the north for natural cooling and include passive solar design (e.g., daylighting). cb. Use light-colored roofing materials to reflect heat.	Applicant	Field Verification and review and include applicable and feasible rules as part of environmental document	1. 2. 3.	LACDRP LACDRP Prior to Tentative Subdivision Map Approvals

cc. Increase walls and attic insulation beyond Title 24 requirements.

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.9 AIR QUALITY (cont.)				
cd. Use solar or low emission water heaters.  ce. Use central water heating systems.  cf. Provide shade trees to reduce building heating/cooling needs.  cg. Use energy-efficient and automated controls for air conditioners.  ch. Use double-paned windows.  ci. Use energy-efficient low-sodium parking lot lights.  cj. Use lighting controls and energy-efficient lighting.  ck. Use light-colored roofing materials to reflect heat.  cl. Increase walls and attic insulation beyond Title 24 requirements.  cm. Orient buildings to the north for natural cooling and include passive solar design (e.g., daylighting).	Applicant	Field Verification and review and include applicable and feasible rules as part of environmental document	1. 2. 3.	LACDRP LACDRP Prior to Tentative Subdivision Map Approvals
SP 4.10-10. All non-residential development of 25,000 gross square feet or more shall comply with the County's Transportation Demand Management (TDM) Ordinance (Ordinance No. 93-0028M) in effect at the time of subdivision. The sizes and configurations of the Specific Plan's non-residential uses are not known at this time and the Ordinance specifies different requirements based on the size of the project under review. All current provisions of the ordinance are summarized in <b>Appendix 4.10</b> .	Applicant	Include Requirement in Future environmental documents and/or check at Building Permit	1. 2. 3.	LACDPW LACDRP Tentative Map Approval or Building Permit, as applicable
SP 4.10-11. Subdivisions and buildings shall comply with Title 24 of the California Code of Regulations which are current at the time of development.	Applicant	Include Requirement in Future environmental documents and/or check at Building Permit	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Building and Safety LACDPW, Building and Safety Tentative Map Approval or Building Permit, as applicable

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.9 AIR Q	UALITY (cont.)	U			U
SP 4.10-12.	Lighting for public streets, parking areas, and recreation areas shall utilize energy efficient light and mechanical, computerized or photo cell switching devices to reduce unnecessary energy usage.	Applicant	Include Requirement in Future environmental documents and/or check at Building Permit	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW  LACDPW  Tentative Map Approval or Building Permit, as applicable
SP 4.10-14.	The sellers of new residential units shall be required to distribute brochures and other relevant information published by the SCAQMD or similar organization to new homeowners regarding the importance of reducing vehicle miles traveled and related air quality impacts, as well as on local opportunities for public transit and ridesharing.	Applicant	LACDRP Review of information package and distribution records	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Department of Regional Planning LA County Department of Regional Planning Prior to Issuance of Building Permit (Package) and Occupancy Permits (Records
LV 4.9-1.	Maintain construction equipment and vehicle engines in good condition and in proper tune as per manufacturers' specifications and per SCAQMD rules, to minimize exhaust emissions.	Applicant (Construction Superintendent)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW During Grading During Construction
LV 4.9-2.	All on-road and off-road construction equipment shall use aqueous fuel, to the extent feasible, as determined by the County of Los Angeles. Aqueous fuel is a stable emulsion of up to 55 percent water and petroleum-based naphtha (a petroleum product from the earliest stages of the refinery process), with trace amounts of bonding and winterizing agents. It can be used to run both gasoline and diesel engines. Aqueous fuel is clean-burning and, based on information provided in the URBEMIS2002 model for its use in construction equipment, it can reduce $NO_x$ emissions by 14 percent and $PM_{10}$ emissions by 63 percent.	Applicant (Construction Superintendent)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW  LACDPW  During Grading  During Construction

4.9 AIR Q	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.9-3.	All on-road and off-road construction equipment shall employ cooled exhaust gas recirculation technology, to the extent feasible, as determined by the County of Los Angeles.  Cooled exhaust gas recirculation (EGR) reduces Carbon Monoxide (CO), Volatile Organic Compounds (VOC), NOx, and Fine Particulate Matter (PM10) emissions as follows: Oxygen is required for fuel to be consumed in a combustion engine. The high temperatures found within combustion engines cause nitrogen in the surrounding air to react with any unused oxygen from the combustion process to form NOx. EGR technology directs some of the exhaust gases that have already been used by the engine and no longer contain much oxygen back into the intake of the engine. By mixing the exhaust gases with fresh air, the amount of oxygen entering the engine is reduced. Since there is less oxygen to react with, fewer nitrogen oxides are formed and the amount of nitrogen oxides that a vehicle releases into the atmosphere is decreased. Based on information provided in the URBEMIS2002 model for its use in construction equipment, cooled exhaust gas recirculation technology can reduce CO and VOC emissions by 90 percent, NOx emissions by 40 percent and PM10 emissions by 85 percent.	Applicant (Construction Superintendent)	Field Verification	1. 2. 3.	LACDPW LACDPW During Grading During Construction
LV 4.9-4.	All on-road and off-road construction equipment shall employ diesel particulate filters, which can reduce $PM_{10}$ emissions from construction equipment by as much as 80 percent based on information provided in the URBEMIS2002 model.	Applicant (Construction Superintendent)	Field Verification	1. 2. 3.	LACDPW LACDPW During Grading and Construction
V 4.9-5.	Any dry cleaners proposing to locate on site shall utilize the services of off-site cleaning operations at already SCAQMD-permitted locations. No on-site dry cleaning operations shall be permitted within Landmark Village.	Applicant	Site Plan Check	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Issuance of Buildi Permit

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.9 AIR Q	UALITY (cont.)				
LV 4.9-6.	The project developer(s) shall coordinate with Santa Clarita Transit to identify appropriate bus stop/turnout locations.	Applicant	Site Plan Check	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Issuance of Building Permit
LV 4.9-7.	Kiosks containing transit information shall be constructed by the project applicant adjacent to selected future bus stops prior to initiation of bus service to the site.	Applicant	Site Plan Check	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP  LACDRP  Prior to Issuance of Occupancy Permit
LV 4.9-8. 4.10 WAT	Wood-burning fireplaces and stoves shall be prohibited in all residential units. Use of wood in fireplaces shall be prohibited through project Covenants, Conditions, and Restrictions (CC&R).  TER SERVICE	Applicant	Building Plan Check	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Issuance of Building Permit
SP 4.11-1.	The proposed Specific Plan shall implement a water reclamation system in order to reduce the Specific Plan's demand for imported potable water. The Specific Plan shall install a distribution system to deliver non-potable reclaimed water to irrigate land uses suitable to accept reclaimed water, pursuant to Los Angeles County Department of Health Standards. (Consistent with this measure, the Project Description section of this EIR discusses the fact that the Landmark Village project will install and implement a recycled water delivery system in order to reduce the project's demand for imported potable water. As required by this measure, recycled (reclaimed) water would be used to irrigate land uses suitable to accept recycled water, pursuant to Los Angeles County Department of Health standards.)	Applicant	Subdivision Map Improvement Plan Check	1. 2. 3.	LACDRP LACDPW Prior to Issuance of Building Permit(s)

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase					
4.10 WAT	ER SERVICE (cont.)									
SP 4.11-2.	Landscape concept plans shall include a palette rich in drought-tolerant and native plants. (Consistent with this measure, the Landmark Village project's landscape plans shall include a palette rich in drought-tolerant and native plants.)	Applicant	Preliminary Landscape Plan Review	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW  LA County Fire Department or Parks and Recreation  Prior to Recordation of Final					
SP 4.11-3.	Major manufactured slopes shall be landscaped with materials that will eventually naturalize, requiring minimal irrigation. (Consistent with this measure, the Landmark Village project's grading/landscape plans shall include a note requiring landscaping with materials that will eventually naturalize, requiring	Applicant	Applicant Preliminary Landscape Plan Review Applicant Architectural Plans	1. 2.	Map LACDPW LA County Fire Department or Parks and Recreation					
SP 4.11-4.	minimal irrigation.)  Water conservation measures as required by the State of California shall be	Applicant		<ol> <li>3.</li> <li>1.</li> </ol>	Prior to Recordation of Final Map California Department of					
	incorporated into all irrigation systems. (Consistent with this measure, the Landmark Village project shall incorporate into all of its irrigation systems, water conservation measures required by the State of California.)	= =			Plans	Plans	Plans	Plans	2.	Conservation  LACDPW, Building and Safety
				3.	Prior to Issuance of Building Permit(s)					
SP 4.11-6.	In conjunction with the submittal of applications for tentative tract maps or parcel maps which permit construction, and prior to approval of any such tentative maps, and in accordance with the requirements of the Los Angeles County General Plan Development Monitoring System (DMS), as amended, Los Angeles County shall require the applicant of the map to obtain written confirmation from the retail water agency identifying the source(s) of water available to serve the map concurrent with need. If the applicant of such map cannot obtain confirmation that a water source(s) is available for buildout of the map, the map shall be phased with the timing of an available water source(s), consistent with the County's DMS requirements. (Consistent with this measure, Valencia Water Company, the retail water purveyor for the Landmark Village project, has issued its SB 610 water supply assessment for the project, confirming the availability of water to serve the project concurrent with need.)	Applicant	Written Confirmation of Water Availability	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Recordation of Final Subdivision Maps					

4 10 M/A T	Mitigation Measures/Conditions of Approval ER SERVICE (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.10 WA1	ER SERVICE (COIL)				
SP 4.11-7. Prior to commencement of use, all uses of recycled water shall be reviewed and approved by the State of California Health and Welfare Agency, Department of Health Services. (Consistent with this measure, the Landmark Village project's recycled water delivery system shall be reviewed and approved by the State of California Health and Welfare Agency, Department of Health Services.)	Prior to commencement of use, all uses of recycled water shall be reviewed and approved by the State of California Health and Welfare Agency,	Applicant	Plan Check	1.	County Department of Health Services
			2.	LACDPW, Building and Safety	
	the State of Cathornia Heath and Weijare Agency, Department of Heath Services.)			3.	Prior to Issuance of Grading or Occupancy Permit(s) as applicable
SP 4.11-8.	Prior to the issuance of building permits that allow construction, the applicant of the subdivision shall finance the expansion costs of water	Applicant	Payment of Connection	1.	Castaic Lake Water Agency (CLWA)/VWC
	service extension to the subdivision through the payment of connection fees to the appropriate water agency(ies). (Consistent with this measure, prior to	Fees	Fees	2.	LACDPW, Building and Safety
	issuance of building permits, the applicant for the Landmark Village project shall finance the required water service extension/expansion costs to the Landmark Village subdivision through the payment of connection fees to the appropriate water agency or agencies.)			3.	Prior to Issuance of Building Permits

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.10 WATER SERVICE (cont.)				
SP 4.11-9. Pursuant to Public Resources Code §21081(a)(2), the County shall recommend that the Upper Santa Clara Water Committee (or Santa Clarita Valley Water Purveyors), made up of the Castaic Lake Water Agency, Los Angeles County Waterworks District No. 36, Newhall County Water District, Santa Clarita Water Division of CLWA and the Valencia Water		Receipt of Annual Report	<ol> <li>2.</li> <li>3.</li> </ol>	Board of Supervisors  LACDRP  Prior to Recordation of Final Subdivision Maps

Company, prepare an annual water report that will discuss the status of groundwater within the Alluvial and Saugus Aquifers, and State Water Project water supplies as they relate to the Santa Clarita Valley. The report will also include an annual update of the actions taken by CLWA to enhance the quality and reliability of existing and planned water supplies for the Santa Clarita Valley. In those years when the Committee or purveyors do not prepare such a report, the applicant at its expense shall cause the preparation of such a report that is acceptable to the County to address these issues. This annual report shall be provided to Los Angeles County who will consider the report as part of its local land use decisionmaking process. (To date, four such water reports have been prepared (1998, 1999, 2000, and 2001) and provided to both the County of Los Angeles and the City of Santa Clarita.) (To date, four such water reports have been prepared (1998, 1999, 2000 and 2001) and provided to both the County of Los Angeles and the City of Santa Clarita.) (As an update, a total of seven annual water reports have been prepared and provided to the County of Los Angeles, the City of Santa Clarita and other interested persons and organizations from 1998 through 2004. The latest 2004 Santa Clarita Valley Water Report is included in Appendix **4.10** of this EIR.)

Impact Sciences, Inc.

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Mitigation Measures/Conditions of Approval 4.10 WATER SERVICE (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.11-10. Pursuant to Public Resources Code §21081(a)(2), the County shall recommend that CLWA, in cooperation with other Santa Clarita Valley retail water providers, continue to update the Urban Water Management Plan (UWMP) for Santa Clarita Valley once every five years (on or before December 31) to ensure that the County receives up-to-date information about the existing and planned water supplies in the Santa Clarita Valley. The County will consider the information contained in the updated UWMP in connection with the County's future local land use decision-making process. The County will also consider the information contained in the updated UWMP in connection with the County's future consideration of any Newhall Ranch tentative subdivision maps allowing construction. (CLWA and other local retail water purveyors are expected to complete the 2005 Urban Water Management Plan (2005 UWMP) for the CLWA service area in the fall 2005. The County will consider the information contained in the adopted 2005 UWMP in connection with the Landmark Village project.) (This mitigation will be also applicable to subsequent updates to the UWMP).	Applicant	Receipt of written identification of water service from retailer	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	Board of Supervisors LACDRP Prior to Recordation of Final Subdivision Maps

Mitigation Measures/Conditions of Approval 4.10 WATER SERVICE (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.11-15. Groundwater historically and presently used for crop irrigation on the Newhall Ranch Specific Plan site and elsewhere in Los Angeles County shall be made available by the Newhall Land and Farming Company, or its assignee, to partially meet the potable water demands of the Newhall Ranch Specific Plan. The amount of groundwater pumped for this purpose shall not exceed 7,038 Acre-feet per year (AFY). This is the amount of groundwater pumped historically and presently by the Newhall Land and Farming Company in Los Angeles County to support its agricultural operations. Pumping this amount will not result in a net increase in groundwater use in the Santa Clarita Valley. To monitor groundwater use, the Newhall Land and Farming Company, or its assignee, shall provide the County an annual report indicating the amount of groundwater used in Los Angeles County and the specific land upon which that groundwater was historically used for irrigation. For agricultural land located off the Newhall Ranch Specific Plan site in Los Angeles County, at the time agricultural groundwater is transferred from agricultural uses on that land to Specific Plan uses, The Newhall Land and Farming Company, or its assignee, shall	Applicant	Receipt of written identification of water service provider or applicant	1. 2. 3.	Board of Supervisors LACDRP Prior to Recordation of Final Subdivision Maps

will provide the County with the required annual report.)

provide a verified statement to the County's Department of Regional Planning that Alluvial aquifer water rights on that land will now be used to meet Specific Plan demand. (Consistent with this measure, the applicant

Mitigation Measures/Conditions of Approval 4.10 WATER SERVICE (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.11-16. The agricultural groundwater used to meet the needs of the Specific Plan shall meet the drinking water quality standards required under Title 22 prior to use. (Consistent with this measure, the agricultural groundwater used to meet the needs of the Landmark Village project shall meet the drinking water quality standards required under Title 22 prior to use.)	Applicant	Receipt of written report on water quality from ASR program engineer	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDRP Concurrent with Submittal of Application for Tentative Tract Maps which permit construction.
SP 4.11-17. In conjunction with each project-specific subdivision map for the Newhall Ranch Specific Plan, the County shall require the applicant of that map to cause to be prepared a supplemental or subsequent Environmental Impact Report, as appropriate, pursuant to CEQA requirements. By imposing this EIR requirement on each Newhall Ranch tentative subdivision map application allowing construction, the County will ensure that, among other things, the water needed for each proposed subdivision is confirmed as part of the County's subdivision map application process. This mitigation requirement shall be read and applied in combination with the requirements set forth in revised Mitigation Measure 4.11-6, above, and in Senate Bills 221 and 610, as applicable, regardless of the number of lots in a subdivision map. (This measure has been satisfied by the County requiring preparation of this EIR for the Landmark Village project.)	Applicant	Review of Subdivision Map Application	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDRP Concurrent with Submittal of Application for Tentative Tract Maps which permit construction.

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Mitigation Measures/Conditions of Approval 4.10 WATER SERVICE (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.11-19. A Memorandum of Understanding (MOU) and Water Resource Monitoring Program has been entered into between United Water Conservation District and the Upper Basin Water Purveyors, effective August 20, 2001. The MOU/Water Resource Monitoring Program, when executed, will put in place a joint water resource monitoring program that will be an effective regional water management tool for both the Upper and Lower Santa Clara River areas as further information is developed, consistent with the MOU. This monitoring program will result in a database addressing water usage in the Saugus and Alluvium aquifers over various representative water cycles. The parties to the MOU intend to utilize this database to further identify surface water and groundwater impacts on the Santa Clara River Valley. The applicant, or its designee, shall cooperate in good faith with the continuing efforts to implement the MOU and Water Resource Monitoring Program.  As part of the MOU process, the United Water Conservation District and the applicant have also entered into a "Settlement and Mutual Release" agreement, which is intended to continue to develop data as part of an ongoing process for providing information about surface and groundwater resources in the Santa Clara River Valley. In that agreement, the County and the applicant have agreed to the following:  4.3 Los Angeles County and Newhall will each in good faith cooperate with the parties to the MOU and will assist them as requested in the development of the database calibrating water usage in the Saugus and Alluvium aquifers over multi-year water cycles. Such cooperation will include, but not be limited to, providing the parties to the MOU with historical well data and other data concerning surface water and groundwater in the Santa Clara River and, in the case of Newhall, providing Valencia Water Company with access to wells for the collection of well data for the MOU.		Review of Initial Study and subdivision maps	1. 2. 3.	LACDRP Concurrent with Submittal of Application for Tentative Tract Maps which permit construction.

Mitigation Measures/Conditions of Approval 4.10 WATER SERVICE (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.4 Los Angeles County and Newhall further agree that the County of Los Angeles will be provided with, and consider, the then-existing data produced by the MOU's monitoring program in connection with, and prior to, all future Newhall Ranch subdivision approvals or any other future land use entitlements implementing the Newhall Ranch Specific Plan. If the then-existing data produced by the MOU's monitoring program identifies significant impacts to surface water or groundwater resources in the Santa Clara River Valley, Los Angeles County will identify those impacts and adopt feasible mitigation measures in accordance with the California Environmental Quality Act. (Since the MOU was signed in 2001, the United Water Conservation District and the Upper Basin Water Purveyors [CLWA, Los Angeles County Waterworks District #36, CLWA Santa Clarita Water Division, NCWD and Valencia Water Company] have worked together to accomplish the stated purpose and objectives of the MOU. The MOU has resulted in the collection and analysis of groundwater and other hydrologic data, along with construction and calibration of a sophisticated regional groundwater flow model for the Upper Basin. These efforts benefit the service areas of both the United Water Conservation District and the Upper Basin water purveyors.)	Applicant	Review of Initial Study and subdivision maps	1. 2. 3.	LACDRP  Concurrent with Submittal of Application for Tentative Tract Maps which permit construction.
SP 4.11-21. The applicant, in coordination with RWQCB staff, shall select a representative location upstream and downstream of the Newhall Ranch Specific Plan and sample surface and groundwater quality. Sampling from these two locations would begin upon approval of the first subdivision map and be provided annually to the RWQCB and County for the purpose of monitoring water quality impacts of the Specific Plan over time. If the sampling data results in the identification of significant new or additional water quality impacts resulting from the Specific Plan, which were not previously known or identified, additional mitigation shall be required at the subdivision map level.	Applicant	Water quality sampling in coordination with RWQCB staff	1. 2. 3.	LACDRP  LACDRP/RWQCB  Concurrent with Approval of the first Subdivision Map which permits construction, and annually thereafter.

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.10 WAT	ER SERVICE (cont.)				
SP 4.11-22	Beginning with the filing of the first subdivision map allowing construction on the Specific Plan site and with the filing of each subsequent subdivision map allowing construction, the Specific Plan applicant, or its designee, shall provide documentation to the County of Los Angeles identifying the specific portion(s) of irrigated farmland in the County of Los Angeles proposed to be retired from irrigated production to make agricultural water available to serve the subdivision. As a condition of subdivision approval, the applicant or its designee, shall provide proof to the County that the agricultural land has been retired prior to issuance of building permits for the subdivision. (Consistent with this measure, the applicant of the Landmark Village project has provided the County with the required documentation. As a condition of approval of the Landmark Village tract map, the applicant will provide proof to the County that the agricultural land in the County proposed to be retired from irrigated production, in fact, has been retired prior to issuance of building permits for the Landmark Village subdivision.)	Applicant	Receipt of written report from applicant	1. 2. 3.	LACDRP  Concurrent with Submittal of Application for Tentative Tract Maps which permit construction.
	Prior to approval of the first subdivision map which permits construction, a report will be provided by the applicant which evaluates methods to recharge the Saugus Aquifer within the Specific Plan, including the identification of appropriate candidate land areas for recharge. The report shall be subject to approval by the Department of Public Works (DPW) and other applicable regulatory agencies, as determined by DPW	Applicant	Receipt of written report from applicant	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Approval of the first Tentative Tract Map
4.11 WAS	TEWATER DISPOSAL				
SP 4.12-1.	The Specific Plan shall reserve a site of sufficient size to accommodate a water reclamation plant to serve the Newhall Ranch Specific Plan. ( <i>This measure is complete</i> ).	Applicant	Specific Plan Review		LA County Department of Regional Planning LA County Department of Regional Planning Prior to Final Approval of Specific Plan

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.11 WAS	TEWATER DISPOSAL (cont.)				
SP 4.12-2.	constructed on the Specific Plan site, pursuant to County, state, and federal design standards, to serve the Newhall Ranch Specific Plan. (This measure Plans	Review of WRP Construction Plans	1.	County Sanitation Districts of Los Angeles County (CSDLAC)	
	will be implemented pursuant to the project-level analysis already completed for the Newhall Ranch WRP in the certified Newhall Ranch Specific Plan EIR.)			2.	CSDLAC
	The committee of the configuration of the property of the configuration			3.	Prior to Demand for First Phase or WRP Capacity
SP 4.12-3.	The Conceptual Backbone Sewer Plan shall be implemented pursuant to	. ,		1.	LACDPW
	County, state, and federal design standards. Engineer) Tentativ	Tentative Map	2.	LACDPW	
				3.	Prior to Approval of Tentative Maps
SP 4.12-4.	Prior to recordation of each subdivision permitting construction, the	Applicant	Review Final	1.	CSDLAC
	applicant of each subdivision shall obtain a letter from the new County sanitation district stating that treatment capacity will be adequate for that		Subdivision Map	2.	LACDPW
	subdivision.		wap	3.	Prior to Recordation of Each Final Subdivision Map
SP 4.12-5.	All facilities of the sanitary sewer system will be designed and constructed		Review Final	1.	CSDLAC, LACDPW
	for maintenance by the County of Los Angeles Department of Public Works and the County Sanitation Districts of Los Angeles County, and/or the new	Engineer)	Subdivision Plans	2.	CSDLAC, LACDPW
	County sanitation district or similar entity in accordance with their manuals, criteria, and requirements.		Tians	3.	Prior to Recordation of Each Final Subdivision Map
SP 4.12-6.	Pursuant to Los Angeles County Code, Title 20, Division 2, all industrial	Applicants for	Plan Check	1.	LACDPW
	01	Review	2.	LACDPW	
	be reviewed by the County of Los Angeles Department of Public Works, Industrial Waste Planning and Control Section and/or the new County sanitation district, to determine if they would be subject to an Industrial Wastewater Disposal Permit.	Facilities		3.	Prior to Issuance of Building Permits

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.11 WASTEWATER DISPOSAL (cont.)				
SP 4.12-7. Each subdivision permitting construction shall be required to be annexed into the Los Angeles County Consolidated Sewer Maintenance District.	LACDPW	Review of Final Sewer Plans	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW After County Acceptance of Sewer Improvements
4.12 SOLID WASTE DISPOSAL				
<ul> <li>SP 4.15-1. Each future subdivision which allows construction within the Newhall Ranch Specific Plan shall meet the requirements of all applicable solid waste diversion, storage, and disposal regulations that are in effect at the time of subdivision review. Current applicable regulations include recycling areas that are: <ul> <li>compatible with nearby structures;</li> <li>secured and protected against adverse environmental conditions;</li> <li>clearly marked, and adequate in capacity, number and distribution;</li> <li>in conformance with local building code requirements for garbage collection access and clearance;</li> <li>designed, placed and maintained to protect adjacent developments and transportation corridors from adverse impacts, such as noise, odors, vectors, or glare;</li> <li>in compliance with federal, state, or local laws relating to fire, building, access, transportation, circulation, or safety; and</li> <li>convenient for persons who deposit, collect, and load the materials.</li> </ul> </li> </ul>	Applicant	Include in Future Subdivision Design and/or environmental documents for Tentative Maps	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Waste Management Division LACDPW, Waste Management Division Prior to Tentative Map Approval

Mitigation Measures/Conditions of Approval 4.12 SOLID WASTE DISPOSAL (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.15-2. Future multi-family, commercial, and industrial projects within the Speci Plan shall provide accessible and convenient areas for collecting a loading recyclable materials. These areas are to be clearly marked a adequate in capacity, number, and distribution to serve the development.	nd	Include in Future Subdivision Design and/or environmental documents for Tentative Maps	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW, Waste Management Division LACDPW, Waste Management Division Prior to Tentative Map Approval
SP 4.15-3. The first purchaser of each residential unit within the Specific Plan shall given educational or instructional materials which will describe who constitutes recyclable and hazardous materials, how to separate recyclal and hazardous materials, how to avoid the use of hazardous materials, a what procedures exist to collect such materials.	at ole	Review of Information Package and Distribution Records	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP
SP 4.15-4. The applicant of all subdivision maps which allow construction within to Specific Plan shall comply with all applicable future state and Los Ange County regulations and procedures for the use, collection, and disposal solid and hazardous wastes.	es	Include in Future Subdivision Design and/or environmental documents for Tentative Maps	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Waste Management Division LACDPW, Waste Management Division Prior to Tentative Map Approval
LV 4.12-1. The project shall comply with Title 20, Chapter 20.87, of the Los Ange County Code, Construction and Demolition Debris Recycling. The project proponent shall also prepare a Recycling and Reuse Plan to recycle, a minimum, 50 percent of the construction and demolition debris, which she submitted to the Los Angeles County Environmental Programs Division	ect a all	Review of Waste Management Plan and corresponding reports	<ol> <li>2.</li> <li>3.</li> </ol>	Environmental Programs Division

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase		
4.13 SHER	RIFF SERVICES						
SP 4.17-1.	As subdivision maps are submitted to the County for approval in the future, the applicant shall incorporate County Sheriff's Department design	Applicant	Plan Check	1.	LA County Sheriff's Department		
	requirements (such as those pertaining to site access, site security lighting, etc.) which will reduce demands for Sheriff's service to the subdivisions and which will help ensure adequate public safety features within the tract	and Field		2.	LA County Sheriff's Department		
	designs.			3.	Prior to Final Map Approvals and Verify Prior to Issuance of Occupancy Permits		
LV 4.13-1.	Construction signs shall be posted with a reduced construction zone speed	Applicant	Field Verification	1.	California Highway Patrol		
	limit. These signs shall be posted to the satisfaction of the California Highway Patrol.	Verification		Verification	Verification	2.	California Highway Patrol
	Tilgitivay Fation			3.	During All Construction Phases		
LV 4.13-2.	Prior to the commencement of construction activities, the project applicant,	the commencement of construction activities, the project applicant, Applicant Contrac	Contract	1.	California Highway Patrol		
	or its designee, shall retain the services of a private security company to patrol the construction site(s), as necessary, to minimize the potential for		Review	2.	California Highway Patrol		
	trespass, theft and other unlawful activity associated with construction-related activities.		Field Verification	3.	During Chiquito Canyon Grading Site Phase		
LV 4.13-3.	Prior to the commencement of construction activities, the project applicant, or its designee shall prepare an approved traffic management plan for	Applicant Review of Approved		1.	LA County Sheriff's Department		
	construction activities affecting rights-of-way within the jurisdiction of Caltrans and the Los Angeles County Department of Public Works.		Traffic Management	2.	LA County Sheriff's Department		
			Plan	3.	Prior to Issuance of Grading Permit		
LV 4.13-4.	Prior to the issuance of building permits for commercial, office, and industrial development, and for single-family and multi-family residential	Applicant	Payment of Fees	1.	LA County Sheriff's Department		
adopted, the project applicant, or its designee shall pay the la	development where a Capital Improvement/Construction Plan has been adopted, the project applicant, or its designee shall pay the law enforcement			2.	LA County Sheriff's Department		
	facilities fee required by the Los Angeles County Code.			3.	Prior to Issuance of Building Permits		

Mitigation Measures/Conditions of Approval 4.14 FIRE PROTECTION SERVICES	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.18-1. At the time of final subdivision maps permitting construction in development areas that are adjacent to Open Area and the High Country SMA, a Wildfire Fuel Modification Plan shall be prepared and submitted for approval by the County Fire Department. The Wildfire Fuel Modification Plan shall include the following construction period requirements: (a) a fire watch during welding operations; (b) spark arresters on all equipment or vehicles operating in a high fire hazard area; (c) designated smoking and non-smoking areas; and (d) water availability pursuant to County Fire Department requirements. The wildfire fuel modification plan shall depict a fuel modification zone in conformance with the Fuel Modification Ordinance in effect at the time of subdivision. Within the zone, tree pruning, removal of dead plant material and weed and grass cutting shall take place as required by the County Forester. Fire resistant plant species containing habitat value may be planted in the fuel modification zone.	Applicant	Receipt and Review of Wildfire Fuel Modification Plan	1. 2. 3.	LA County Fire Department LA County Fire Department Prior to Approval of Final Maps
SP 4.18-2. Each subdivision and site plan for the proposed Specific Plan shall provide sufficient capacity for fire flows of 1,250 gallons per minute (gpm) at 20 pounds per square inch (psi) residual pressure for a two hour duration for single family residential units, and 5,000 gpm at 20 psi residual pressure for a five-hour duration for multi-family residential units and commercial/retail uses, or whatever fire flow requirement is in effect at the time of subdivision and site plan approval.	Applicant	Field Verification of Required Fire Flows	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Fire Department LA County Fire Department Prior to Issuance of Occupancy Permits
SP 4.18-3. Each subdivision map and site plan for the proposed Specific Plan shall comply with all applicable building and fire codes and hazard reduction programs for Fire Zones 3 and 4 that are in effect at the time of subdivision map and site plan approval.	Applicant	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Fire Department LA County Fire Department Prior to Issuance of Occupancy Permits

Mitigation Measures/Conditions of Approval 4.14 FIRE PROTECTION SERVICES (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.18-4. The developer will provide funding for three fire stations to the Consolidated Fire Protection District of Los Angeles County (the "Fire District") in lieu of developer fees. The developer will dedicate two fire station sites for the two fire stations located in Newhall Ranch. The Fire District will dedicate the site for the fire station to be located at the Del Valle Training Facility. Each fire station site will have a building pad consisting of a net buildable area of one acre. If the cost of constructing the three fire stations, providing and dedicating the two fire station sites, and providing 3-engines, 1 paramedic squad and 63 percent of a truck company exceeds the developer's developer fee obligation for the Newhall Ranch development as determined by the Fire District, the Fire District will fund the costs in excess of the fee obligation.  Two of the three fire stations to be funded by the developer will not exceed 6,000 square feet; the third fire station to be funded by the developer will not exceed 8,500 square feet. The Fire District, will fund the cost of any space/square footage of improvement in excess of these amounts as well as the cost of the necessary fire apparatus for any such excess square footage of improvements. The cost of three fire engines, a proportionate share of a truck and one squad to be provided by the developer will be determined based upon the apparatus cost at the time the apparatus is placed in service.	Applicant	Execute "Fire Protection Plan" Agreement  Monitor Adequacy of Fire Prevention Services	1. 2. 3.	J I

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

### **4.14 FIRE PROTECTION SERVICES (cont.)**

SP 4.18-4. (cont.)

The Fire District and the developer will mutually agree to the requirements of first-phase protection requirements based upon projected response/travel coverage. Such mutual agreement regarding first-phase fire protection requirements ("fire protection plan") and the criteria for timing the development of each of the three fire stations will be defined in a Memorandum of Understanding between the developer and the Fire District. Delivery of fire service for Newhall Ranch will be either from existing fire stations or one of the three fire stations to be provided by the developer pursuant to this section. Prior to the commencement of the operation of any of the three fire stations, fire service may be delivered to Newhall Ranch from existing fire stations or from temporary fire stations to be provided by the developer at mutually agreed-upon locations, to be replaced by the permanent stations which will be located within the Newhall Ranch development. The developer and the Fire District will annually review the fire protection plan to evaluate development and market conditions and modify the Memorandum of Understanding accordingly.

LV 4.14-1. Prior to approval of a final subdivision map for the project, the applicant must prepare and submit for approval by the County Fire Department a fuel modification plan, a landscape plan and an irrigation plan for the project, as required by Section 1117.2.1 of the County of Los Angeles Fire Code.

Applicant

Receipt and Review of Fuel Modification Plan, Landscape Plan, and Irrigation Plan

- 1. LA County Fire Department
- 2. LA County Fire Department
- 3. Prior to Approval of First Final Subdivision Map

4.14 FIRE	Mitigation Measures/Conditions of Approval PROTECTION SERVICES (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.14-2.	Prior to the issuance of any building permits, the applicant must obtain	Applicant	Execution of	1.	LA County Fire Department
	approval of a Memorandum of Understanding (MOU) from the Fire Chief of the Fire District that sets out requirements necessary to fully mitigate all		MOU	2.	LA County Fire Department
	impacts of the Newhall Ranch Project on fire protection and emergency medical services. The MOU will include the provisions for apparatus, land, construction, and equipping of fire stations, and other requirements necessary to fully mitigate the impacts of the Newhall Ranch Project on emergency services. For the Landmark Project, the MOU will require a fully equipped fire stations that is constructed on 1.25 acres and built to Fire District approved requirements/specifications, and vehicle apparatus (a fully equipped pumper engine and paramedic squad) be conveyed by applicant to the Fire District prior to the issuance of the 723rd certificate of occupancy.			3.	Prior to Issuance of any Building Permit
LV 4.14-3.	If the project applicant alters the Fire District's road access, it must provide	Applicant	Plan Review	1.	LA County Fire Department
	paved access acceptable to the Fire District from Chiquito Canyon Road to the Del Valle facility.			2.	LA County Fire Department
	the Ber vane identity.			3.	Prior to Issuance of Building Permits
LV 4.14-4.	The proposed development shall provide multiple ingress/egress access for	Applicant	Plan Review	1.	LA County Fire Department
	the circulation of traffic, and emergency response issues. Said			2.	LA County Fire Department
	determinations shall be approved through the tentative map approval.			3.	Prior to Final Map Approval
LV 4.14-5.	The development of this project shall comply with all applicable code and	Applicant	Plan Review	1.	LA County Fire Department
	ordinance requirements for construction, access, water mains, fire flows,			2.	LA County Fire Department
	and fire hydrants. Specifics for said requirements shall be established during the review and approval process of the tentative map.			3.	Prior to Final Map Approval
LV 4.14-6.	This property is located within the area described by the Forester and Fire	Applicant	Plan Review	1.	LA County Fire Department
	Warden as a Fire Zone 4, Very High Fire Hazard Severity Zone (VHFHSZ).			2.	LA County Fire Department
	All applicable fire code and ordinance requirements for construction, access, water mains, fire hydrants, fire flows, brush clearance and fuel modification plans, must be met.			3.	Prior to Issuance of Building Permit

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.14 FIRE PROTECTION SERVICES (cont.)				
LV 4.14-7. Specific fire and life safety requirements for the construction phase will	* *	Plan Review	1.	LA County Fire Department
addressed at the building fire plan check. There may be additional fire a	and		2.	LA County Fire Department
life safety requirements during this time.			3.	Prior to Issuance of Building Permit
LV 4.14-8. Every building constructed shall be accessible to Fire Department appara		Plan Review	1.	LA County Fire Department
by way of access roadways, with an all-weather surface of not less than prescribed width and indicated on the Tentative or Exhibit "A" maps.			2.	LA County Fire Department
roadway shall be extended to within 150 feet of all portions of the exterior of building.	rior		3.	Prior to Issuance of Building Permit
LV 4.14-9. Access roads shall be maintained with a minimum of 10 feet of br	1 1	Field Inspection	1.	LA County Fire Department
clearance on each side. Fire access roads shall have an unobstructed vert			2.	LA County Fire Department
clearance clear-to-sky with the exception of protected tree species. Protective tree species overhanging fire access roads shall be maintained to provide vertical clearance of 13 feet, 6 inches. Applicant to obtain all necess permits prior to the commencement of trimming of any protected species.	e a ary		3.	LA County Forester
LV 4.14-10. The maximum allowable grade shall not exceed 15% except wh		Plan Review	1.	LA County Fire Department
topography makes it impractical to keep within such grade; in such case an absolute maximum of 20% will be allowed for up to 150 feet in distant			2.	LA County Fire Department
The average maximum allowed grade, including topographical difficult shall be no more than 17%. Grade breaks shall not exceed 10% in 10 feet.			3.	Prior to Final Map Approval
LV 4.14-11. When involved with a subdivision in unincorporated areas within		Plan Review	1.	LA County Fire Department
County of Los Angeles, Fire Department, requirements for access, fire flo			2.	LA County Fire Department
and hydrants are addressed at the Los Angeles County Subdivis Committee meeting during the subdivision tentative map stage.	ion		3.	Prior to Final Map Approval
LV 4.14-12. Fire sprinkler systems are required in some residential and m		Plan Review	1.	LA County Fire Department
	commercial occupancies. For those occupancies not requiring fire sprinkler		2.	LA County Fire Department
systems, it is encouraged that fire sprinkler systems be installed. This reduce potential fire and life losses. Systems are now technically a economically feasible for residential use.			3.	Prior to Issuance of Building Permit

Mitigation Measures/Conditions of Approval 4.14 FIRE PROTECTION SERVICES (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
<ul> <li>LV 4.14-13. Prior to construction, the following items shall be addressed:</li> <li>a. Installation and inspection of the required all weather access to be provided as determined by building permit issuance.</li> <li>b. Fire hydrants shall be installed and tested prior to the clearance for the commencement of construction.</li> </ul>	Applicant	Plan Review/Field Inspection	1. 2. 3.	LA County Fire Department LA County Fire Department Prior to Building Permit Issuance
INSTITUTIONAL:  LV 4.14-14. The development may require fire flows up to 8,000 gallons per minute at 20 pounds per square inch residual pressure for up to a four-hour duration as outlined in the 2002 County of Los Angeles Fire Code Appendix III-AA. Final fire flows will be based on the size of buildings, their relationship to other structures, property lines, and types of construction used.	Applicant	Plan Review	1. 2. 3.	LA County Fire Department LA County Fire Department Prior to Issuance of Building Permit
LV 4.14-15. Fire hydrant spacing shall be based on fire flow requirements as outlined in the 2002 County of Los Angeles Fire Code Appendix III-BB. Additional hydrants will be required if hydrant spacing exceeds specified distances.	Applicant	Plan Review	1. 2. 3.	LA County Fire Department LA County Fire Department Prior to Final Map Approval
LV 4.14-16. All access devices and gates shall comply with California Code of Regulations, Title 19, Article 3.05 and Article 3.16.Los Angeles County Fire Department Regulation #5.	Applicant	Plan Review	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Fire Department LA County Fire Department Prior to Final Map Approval

Mitigation Measures/Conditions of Approval 4.14 FIRE PROTECTION SERVICES (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
MITTALE IN OTHER COMMY				
COMMERCIAL/HIGH-DENSITY RESIDENTIAL:	Applicant	Plan Review	1.	LA County Fire Department
LV 4.14-17. The development may require fire flows up to 5,000 gallons per minute at			2.	LA County Fire Department
20 pounds per square inch residual pressure for up to a five-hour duration. Final fire flows will be based on the size of buildings, their relationship to other structures, property lines, and types of construction used. Fire flows shall be established as part of the tentative map review process with the submittal of architectural details to determine actual flow requirement. If adequate architectural detail is unavailable during the tentative map review process, maximum fire flows will be established with the ability of the fire flow to be changed during the actual architectural plan review by Fire Prevention Engineering for building permit issuance.			3.	Prior to Issuance of a Building Permit
LV 4.14-18. Fire hydrant spacing shall be 300 feet and shall meet the following requirements:	Applicant	Plan Review	1. 2.	LA County Fire Department LA County Fire Department
<ul> <li>No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.</li> </ul>			3.	Prior to Issuance of a Building Permit
b. No portion of a building shall exceed 400 feet via vehicular access from a properly spaced public fire hydrant.				o e e e e e e e e e e e e e e e e e e e
c. Additional hydrants will be required if hydrant spacing exceeds specified distances.				
d. When cul-de-sac depth exceeds 200 feet on a commercial street, hydrants shall be required at the corner and mid-block.				
e. A cul-de-sac shall not be more than 500 feet in length, when serving land zoned for commercial use.				
LV 4.14-19. Turning radii shall not be less than 32 feet. This measurement shall be	Applicant	Plan Review	1.	LA County Fire Department
determined at the centerline of the road. A Fire Department approved			2.	LA County Fire Department
turning area shall be provided for all driveways exceeding 150 feet in length and at the end of all cul-de-sacs.			3.	Prior to Final Map Approval

Mitigation Measures/Conditions of Approval 4.14 FIRE PROTECTION SERVICES (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.14-20. All on-site driveways/roadways shall provide a minimum unobstructed width of 26 feet, clear-to-sky. The on-site driveway is to be within 150 feet of all portions of the exterior walls of the first story of any building. The centerline of the access driveway shall be located parallel to, and within 30 feet of an exterior wall on one side of the proposed structure.	Applicant	Plan Review	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Fire Department LA County Fire Department Prior to Final Map Approval
<ul> <li>LV 4.14-21. Driveway width for non-residential developments shall be increased when any of the following conditions will exist:</li> <li>a. Provide 34 feet in width, when parallel parking is allowed on one side of the access roadway/driveway. Preference is that such parking is not adjacent to the structure.</li> <li>b. Provide 42 feet in width, when parallel parking is allowed on each side of the access roadway/driveway.</li> <li>c. Any access way less than 34 feet in width shall be labeled "Fire Lane" on the final recording map, and final building plans.</li> <li>d. For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING – FIRE LANE" in 3-inch-high letters. Driveway labeling is necessary to ensure access for Fire Department use.</li> </ul>	Applicant	Plan Review	1. 2. 3.	LA County Fire Department LA County Fire Department Prior to Final Map Approval
SINGLE-FAMILY/TWO-FAMILY DWELLING UNITS:  LV 4.14-22. Single-family detached homes shall require a minimum fire flow of 1,250 gallons per minute at 20 pounds per square inch residual pressure for a two-hour duration. Two-family dwelling units (duplexes) shall require a fire flow of 1,500 gallons per minute at 20 pounds per square inch residual pressure for a two-hour duration. When there are five or more condominium units are taking access on a single driveway, the minimum fire flow shall be increased to 1,500 gallons per minute at 20 pounds per square inch residual pressure for a two-hour duration.	Applicant	Plan Review/Field Inspection	1. 2. 3.	LA County Fire Department LA County Fire Department Prior to Building Permit Issuance

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.14 FIRE PRO	DTECTION SERVICES (cont.)				
	re hydrant spacing shall be 600 feet and shall meet the following quirements:	Applicant	Applicant Plan Review/Field Inspection	1. 2.	LA County Fire Department LA County Fire Department
a.	No portion of lot frontage shall be more than 450 feet via vehicular access from a public fire hydrant.			3.	Prior to Final Map Approval
b.	Lots of 1 acre or more shall place no portion of a structure where it exceeds 750 feet via vehicular access from a properly spaced public fire hydrant.				
c.	When cul-de-sac depth exceeds 450 feet on a residential street, fire hydrants shall be required at the corner and mid-block.				
d.	Additional hydrants will be required if hydrant spacing exceeds specified distances during the tentative map review process or building permit plan check.				
	reets or driveways within the development shall be provided with the lowing:	Applicant	Plan Review	1. 2.	LA County Fire Department LA County Fire Department
a.	Provide 36 feet in width on all streets where parking is allowed on both sides.			3.	Prior to Final Map Approval
b.	Provide 34 feet in width on cul-de-sacs up to 700 feet in length. This allows parking on both sides of the street.				
C.	Provide 36 feet in width on cul-de-sacs from 701 to 1,000 feet in length. This allows parking on both sides of the street.				
d.	For streets or driveways with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating "NO PARKING – FIRE LANE" in 3-inch-high letters. Driveway labeling is necessary to ensure access for Fire Department use.				
e.	Turning radii shall not be less than 32 feet. This measurement shall be determined at the centerline of the road.				

Mitigation Measures/Conditions of Approval 4.14 FIRE PROTECTION SERVICES (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.14 FIRE FROTECTION SERVICES (CORt.)				
LV 4.14-25. A Fire Department approved turning area shall be provided for al	l Applicant	Plan Review	1.	LA County Fire Department
driveways exceeding 150 feet in length and at the end of all cul-de-sacs.			2.	LA County Fire Department
			3.	Prior to Final Map Approval
4.15 EDUCATION				
SP 4.16-1. The Specific Plan developer shall reserve five elementary schools sites, on junior high school site and one high school site, of 7 to 10, 20 to 25, and 40 to	)	Tentative Tract Map	1.	LA County Department of Regional Planning
45 acres in size, respectively, depending upon adjacency to local public parks and joint use agreements.	2	Subdivision Review	2.	LA County Department of Regional Planning
			3.	Prior to Final Approval of Tentative Tract Maps
SP 4.16-2. The developer of future subdivisions which allow construction will comply		Verification of	1.	Newhall School District
with the terms and conditions of the School Facilities Funding Agreemen between The Newhall Land and Farming Company and the Newhall School District.		Compliance from School District	2.	LACDPW, Building and Safety
District.		District	3.	Prior to Issuance of Residential Building Permits
SP 4.16-3. The developer of future subdivisions which allow construction will comply with the terms and conditions of the School Facilities Funding Agreement	t	Verification of Compliance	1.	William S Hart Unified High School District (WSHUHSD)
between The Newhall Land and Farming Company and the William S. Har Union High School District.	t	from School District	2.	LACDPW, Building and Safety
			3.	Prior to Issuance of Residential Building Permits
SP 4.16-4. The developer of future subdivisions which allow construction will comply	7 Applicant	Verification of	1.	Castaic Union School District
with the terms and conditions of the School Facilities Funding Agreemen between The Newhall Land & Farming Company and the Castaic Union School District	nd the Castaic Union from School		2.	LACDPW, Building and Safety
School District.		District	3.	Prior to Issuance of Residential Building Permits

4.15 EDUC	Mitigation Measures/Conditions of Approval CATION (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.16-5.	In the event that School District boundaries on the Specific Plan site remain unchanged, prior to recordation of all subdivision maps which allow construction, the developer of future subdivisions which allow construction is to pay to the Castaic Union School District the statutory school fee for commercial/industrial square footage pursuant to Government Code Sections 65995 and 65996, unless a separate agreement to the contrary is reached with the District.	Applicant	Payment of Fees	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	Castaic Union School District LACDPW, Building and Safety Prior to Issuance of Building Permits
4.16 PARI	KS AND RECREATION				
SP 4.20-1.	<ul> <li>acreages of parks and Open Area:</li> <li>Ten public Neighborhood Parks totaling 55 acres;</li> <li>Open Areas totaling 1,106 acres of which 186 acres are Community Parks;</li> <li>High Country Special Management Area of 4,214 acres;</li> <li>River Corridor Special Management Area of 819 acres;</li> <li>a 15-acre Lake;</li> <li>an 18-hole Golf Course; and</li> <li>a trail system consisting of:  <ul> <li>Regional River Trail,</li> <li>Community Trails, and</li> </ul> </li> </ul>	Applicant	Subdivision Review for Compliance with Specific Plan	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Department of Regional Planning LA County Department of Regional Planning Processing of Tentative Subdivision Maps
SP 4.20-2.	<ul> <li>Unimproved Trails.</li> <li>Prior to the construction of the proposed trail system, the project applicant shall finalize the alignment of trails with the County Department of Parks and Recreation.</li> </ul>	Applicant	Verification of Consultation of Department of Parks and Recreation	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP  LA County Department of Parks and Recreation  Prior to Issuance of Grading Permit for Trails

4.16 PARI	Mitigation Measures/Conditions of Approval KS AND RECREATION (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.20-3.	Trail construction shall be in accordance with the County of Los Angeles Department of Parks and Recreation trail system standards.	Applicant	Trails Plan Review	1.	LA County Department of Parks and Recreation
	Because the proposed Landmark Village project meets the County parkland requirements and exceeds the Quimby Act requirements, no further mitigation measures are required for the proposed project beyond those adopted as part of the Newhall Ranch Specific Plan.		Field Verification	2.	LA County Department of Parks and Recreation Prior to Approval of Trail Plans and Verify Upon Construction Completion
1.17 LIBR.	ARY SERVICES				
5P 4.19-1.	The developer will provide funding for a maximum of two libraries (including the site(s), construction, furniture, fixtures, equipment, and materials) to the County Librarian. The developer will dedicate a maximum of two library sites for a maximum of two libraries located in Newhall Ranch in lieu of the land component of the County's library facilities mitigation fee, in accordance with the provisions of Section 22.72.090 of Section 2 of Ordinance No. 98-0068. The actual net buildable library site area required and provided by the developer will be determined by the actual size of the library building(s), the Specific Plan parking requirements, the County Building Code, and other applicable rules.	Applicant	Review of Memorandum of Understanding and Library Construction Plan	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Library LACDPW Prior to Issuance of First Residential Building Permi
	The total library building square footage to be funded by the developer will not exceed 0.35 net square feet per person. The developer's funding of construction of the library(s) and furnishings, fixtures, equipment and materials for the library(s) will be determined based on the cost factors in the library facilities mitigation fee in effect at the time of commencement of				

construction of the library(s).

	Party			
	Responsible for		1.	Enforcement Agency
	Implementing	Monitoring	2.	Monitoring Agency
Mitigation Measures/Conditions of Approval	Mitigation	Action	3.	Monitoring Phase

#### 4.17 LIBRARY SERVICES (cont.)

SP 4.19-1. (cont.)

Prior to County's issuance of the first residential building permit of Newhall Ranch to the developer, the County Librarian and the developer will mutually agree upon the library construction requirements (location, size, funding and time of construction) based upon the projected development schedule and the population of Newhall Ranch based on the applicable number of average persons per household included in the library facilities mitigation fee in effect at the time. Such mutual agreement regarding the library construction requirements ("Library Construction Plan") and the criteria for timing the completion of the library(s) will be defined in a Memorandum of Understanding between the developer and the County Librarian. Such Memorandum of Understanding shall include an agreement by the developer to dedicate sufficient land and pay the agreed amount of fees on a schedule to allow completion of the library(s) as described below. The developer's funding for library facilities shall not exceed the developer's fee obligation at the time of construction under the developer fee schedule.

If two libraries are to be constructed, the first library will be completed and operational by the time of County's issuance of the 8,000<sup>th</sup> residential building permit of Newhall Ranch, and the second library will be completed and operational by the time of County's issuance of the 15,000<sup>th</sup> residential building permit of Newhall Ranch. If the County Librarian decides that only one library will be constructed, the library will be completed and operational by the time of County's issuance of the 10,000<sup>th</sup> residential building permit of Newhall Ranch.

No payment of any sort with respect to library facilities will be required under Section 2.5.3.d. of the Specific Plan in order for the developer to obtain building permits for nonresidential buildings.

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.18 AGR	ICULTURAL RESOURCES	J			O
SP 4.4-1.	Purchasers of homes located within 1,500 feet of an agricultural field or grazing area are to be informed of the location and potential effects of farming uses prior to the close of escrow.	Applicant	Include this Information in	1.	LA County Department of Regional Planning
			CC&Rs	2.	LA County Department of Regional Planning
4.19 UTIL	ITTIEC			3.	At Home Sales
1.19 U I I L	IIIES				
SP 4.14-1.	All development within the Specific Plan area shall comply with the Energy Building Regulations adopted by the California Energy Commission (Title	Suilding Regulations adopted by the California Energy Commission (Title 4 of the California Administrative Code), as applicable.	Plan Check	1.	LACDPW, Building and Safety
24	24 of the California Administrative Code), as applicable.		Field Verification	2.	LACDPW, Building and Safety
				3.	Prior to Issuance of Occupancy Permit(s)
SP 4.14-2.	Southern California Edison (SCE) or other energy provider is to be notified			1.	LACDRP
	1 1		0;	2.	LACDRP
	prior to recordation of all future subdivisions.			3.	Prior to Recordation of All Subdivisions
SP 4.14-3.	All future tract maps are to comply with SCE or other energy provider guidelines for grading, construction, and development within SCE	Applicant (Construction	Plan Check	1.	LACDPW, Building and Safety
	easements.	Contractor)	Field Verification	2.	LACDPW, Building and Safety
			, same	3.	Prior to Final Tract Map Approvals and Verify Prio to Issuance of Occupancy Permits

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.19 UTIL	ITIES (cont.)				
SP 4.14-4.	Electrical infrastructure removals and relocations are to be coordinated between the Specific Plan engineer and SCE or other energy provider as each tract is designed and constructed.	Applicant (Specific Plan Engineer)	Receipt of Verification of Such Consultations	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Final Tract Map Approval and During Construction
SP 4.14-5.	All future tract maps are to be reviewed by Los Angeles County to ensure adequate accessibility to SCE or other energy provider facilities as a condition of their approvals.	Applicant	Plan Check	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	
SP 4.13-1.	All development within the Specific Plan area shall comply with the Energy Building Regulations adopted by the California Energy Commission (Title 24 of the California Administrative Code), as applicable.	Applicant/Future Owners and Operators within project	Plan Check Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	
SP 4.13-2.	A letter from Southern California Gas Company (SCGC) or other gas provider is to be obtained prior to recordation of all future subdivisions stating that service can be provided to the subdivision under recordation.	Applicant	Receipt of Letter from Gas Provider	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDRP  LACDRP  Prior to Recordation of Final Maps
SP 4.13-3.	The Specific Plan is to meet the requirements of SCGC in terms of pipeline relocation, grading in the vicinity of gas mains, and development within SCGC easements. These requirements would be explicitly defined by SCGC at the future tentative map stage.	Applicant (Construction Contractor)	Receipt and implementation of Such Requirements from SCGC	<ol> <li>2.</li> <li>3.</li> </ol>	-

4.19 UTIL	Mitigation Measures/Conditions of Approval ITIES (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
	All potential buyers or tenants of property in the vicinity of SCGC transmission lines are to be made aware of the line's presence in order to assure that no permanent construction or grading occurs over and within the vicinity of the high-pressure gas mains.  RONMENTAL SAFETY	Applicant	Include in Sale/Lease Disclosure Documents	<ol> <li>2.</li> <li>3.</li> </ol>	LACDRP LACDRP Prior to Issuance of Occupancy Permits
SP 4.5-1.	Not Applicable				
SP 4.5-2.	Only non-habitable structures shall be located within SCE easements.	Applicant	Tentative Tract Map Review	<ol> <li>2.</li> </ol>	LA County Department of Regional Planning LA County Department of
				3.	Regional Planning Prior to Approval of Tract Maps
SP 4.5-3.	Prior to issuance of grading permits, all abandoned oil and natural gas- related sites must be remediated to the satisfaction of the California Department of Oil and Gas, the Los Angeles County Hazardous Materials Control Program, the South Coast Air Quality Management District, and/or the Regional Water Quality Control Board (Los Angeles region).		e Confirmation that Oil- and Natural Gas- Related Sites are Satisfactorily Remediated	1.	California Department of Conservation, Division of Oi and Gas; LA County Hazardous Materials Control Program; SCAQMD; and RWQCBLAR California Department of
					Conservation, Division of Oil and Gas; LA County Hazardous Materials Control Program; SCAQMD; and RWQCBLAR
				3.	Prior to Issuance of Grading Permits

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.21 ENV	IRONMENTAL SAFETY (cont.)				<u> </u>
SP 4.5-5.	The Specific Plan is to meet the requirements of SCGC in terms of pipeline relocation, grading in the vicinity of gas mains, and development within Southern California Gas Company easements. These requirements would be explicitly defined by SCGC at the future tentative map stage.	Applicant (Civil Engineer)	Grading Plan Check	1. 2. 3.	SCGC LACDPW Prior to Approval of Grading Plan
SP 4.5-6.	All potential buyers or tenants of property in the vicinity of Southern California Gas Company transmission lines are to be made aware of the line's presence in order to assure that no permanent construction or grading occurs over and within the vicinity of the high-pressure gas mains.	Applicant	Include this Information in CC&Rs	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Department of Regional Planning LA County Department of Regional Planning At Home Sales
SP 4.5-7.	In accordance with the provisions of the Los Angeles County Building Code, Section 308(d), all buildings and enclosed structures that would be constructed within the Specific Plan located within 25 feet of oil or gas wells shall be provided with methane gas protection systems. Buildings located between 25 feet and 200 feet of oil or gas wells shall, prior to the issuance of building permits by the County of Los Angeles, be evaluated in accordance with the current rules and regulations of the State of California Division of Oil and Gas.	Applicant (Building Contractors)	Include this Requirement in Building Specifications Field Verification	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	
SP 4.5-8.	In accordance with the provisions of the Los Angeles County Building Code, Section 308(c), all buildings and structures located within 1,000 feet of a landfill containing decomposable material (in this case the Chiquito Canyon Landfill) shall be provided with a landfill gas migration protection and/or control system.	Applicant (Building Contractors)	Include this Requirement in Building Specifications Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Building and Safety LACDPW, Building and Safety Prior to Issuance of Occupancy Permits

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.21 ENVI	IRONMENTAL SAFETY (cont.)				
SP 4.5-9.	In accordance with the provisions of the Los Angeles County Code, Title 11, Division 4, Underground Storage of Hazardous Materials regulations, the County of Los Angeles Department of Public Works shall review, prior to the issuance of building permits by the County of Los Angeles, any plans for underground hazardous materials storage facilities (e.g., gasoline) that	Applicant (Building Contractors)	Include this Requirement in Building Specifications	<ol> <li>2.</li> </ol>	LACDPW, Building and Safety LACDPW, Building and Safety
	may be constructed or installed within the Specific Plan.	an. Fie	Field Verification	3.	Prior to Issuance of Occupancy Permits
LV-4.21-1.	During grading operations, those areas of the Landmark Village tract map property, the Adobe Canyon borrow site and the Chiquito Canyon grading		Receipt and Review of	1.	LA County Department of Regional Planning
	site identified as formerly containing above-ground storage tanks, current agricultural storage areas and current soil staining by the Phase I Environmental Site Assessment of Landmark Village Tentative Tract Map No. 53108, Highway 126, Newhall Ranch, California (BNA Environmental, May 2004) and Addendum Letter Phase I Environmental Site Assessment of Proposed Water Tank Locations and Utility Corridor Easements Associated With the Proposed Landmark Village Development Tentative Tract Map No. 53108, State Highway 126, Newhall Ranch, California (BNA Environmental, September 2004), shall be investigated for the presence of petroleum hydrocarbons and hazardous materials and/or wastes, and, where necessary, shall be remediated in conformance with applicable federal, state and local laws, to the satisfaction of the California Department of Conservation, Division of Oil and Gas, the Los Angeles County Hazardous Materials Control Program, the South Coast Air Quality Management District, and/or the Regional Water Quality Control Board (Los Angeles region).		Test Results or Verification of Remediation	2. 3.	LA County Department of Regional Planning  During grading operation

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.21 ENVIRONMENTAL SAFETY (cont.)  LV-4.21-2.During grading operations, all former oil wells located on the Landmark Village tract map property, the Adobe Canyon borrow site and the Chiquito Canyon grading site shall be reabandoned according to the requirements of the California Department of Conservation, Division of Oil and Gas, if such sites are to be disturbed or are located in an area of development.	Applicant (Civil Engineer and Well Abandonment Specialist)	Receipt of Confirmation of Reabandon- ment	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	California Department of Conservation, Division of Oil and Gas, Building and Safety California Department of Conservation, Division of Oil and Gas, Building and Safety During Grading Operations
LV-4.21-3. During grading operations, all pipelines located on the Landmark Village tract map property or the Chiquito Canyon grading site that will no longer be used to transport oil products shall be reabandoned according to the requirements of the California Department of Conservation, Division of Oil and Gas. The soil beneath these pipelines shall be assessed for petroleum hydrocarbons. Any contaminated soil located within grading operations or development areas shall be remediated in conformance with applicable federal, state and local laws, to the satisfaction of the California Department of Conservation, Division of Oil and Gas, the Los Angeles County Hazardous Materials Control Program, the South Coast Air Quality Management District, and/or the Regional Water Quality Control Board (Los Angeles region). Any pipeline to remain in use shall be assessed for hydrocarbon leakage.	Applicant (Civil Engineer and Pipeline Abandonment Specialist)	Receipt of Confirmation of Reabandon- ment  Receipt and Review of Test Results or Verification of Remediation	<ol> <li>2.</li> <li>3.</li> </ol>	California Department of Conservation, Division of Oil and Gas, Building and Safety California Department of Conservation, Division of Oil and Gas, Building and Safety During Grading Operations
LV-4.21-4. During grading operations, all scattered suspect asbestos-containing material debris located on the Landmark Village tract map property, the Adobe Canyon borrow site and the Chiquito Canyon grading site shall be disposed of in accordance with applicable federal, state and local requirements.	Applicant (Building Contractors)	Field Verification	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW, Building and Safety LACDPW, Building and Safety During Grading Operations

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase	
4.21 ENVI	RONMENTAL SAFETY (cont.)					
LV-4,21-5.	In the event that previously unidentified, obvious, or suspected hazardous materials, contamination, underground storage tanks, or other features or materials that could present a threat to human health or the environment	Applicant (Building Contractors)	Field Verification	1.	LACDPW, Building and Safety	
	are discovered during construction, construction activities shall cease immediately until the subject site is evaluated by a qualified professional.	Contractors)		2.	LACDPW, Building and Safety	
Wo pro	Work shall not resume until appropriate actions recommended by the professional have been implemented to demonstrate that contaminant concentrations do not exceed risk-based criteria.			3.	During All Phases of Construction	
4.22 CULT	TURAL/PALEONTOLOGICAL RESOURCES					
SP 4.3-1.	Any adverse impacts to California-LAN-2133, -2235, and the northern portion of -2233 are to be mitigated by avoidance and preservation. Should	Applicant (Archaeologist)	Qualified Archaeologist	1.	LA County Department of Regional Planning	
	preservation of these sites be infeasible, a Phase III data recovery (salvage excavation) operation is to be completed on the sites so affected, with archaeological monitoring of grading to occur during subsequent soils	sites so affected, with Grading uring subsequent soils Activities of preserve the scientific Sites	2.	LA County Department of Regional Planning		
	emovals on the site. This will serve to collect and preserve the scientific information contained therein, thereby mitigating all significant impacts to the affected cultural resource.					3.
SP 4.3-2.	Any significant effects to California-LAN-2241 are to be mitigated through site avoidance and preservation. Should this prove infeasible, an effort is to	Applicant (Archaeologist)	Qualified Archaeologist	1.	LA County Department of Regional Planning	
	be made to relocate, analyze, and re-inter the disturbed burial at some more appropriate and environmentally secure locale within the region.		Present During Grading	2.	LA County Department of Regional Planning	
			Activities of site if not located before	3.	Prior to and During Grading Activities, as appropriate	

4.22 CULT	Mitigation Measures/Conditions of Approval FURAL/PALEONTOLOGICAL RESOURCES (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
SP 4.3-3.	In the unlikely event that additional artifacts are found during grading within the development area or future roadway extensions, an archaeologist will be notified to stabilize, recover, and evaluate such finds.	Applicant (Archaeologist)	Include this Measure in Subdivision Map Conditions if appropriate	<ol> <li>2.</li> <li>3.</li> </ol>	LA County Department of Regional Planning LA County Department of Regional Planning During Tentative Map Processing
SP 4.3-4.	As part of an inspection testing program, a Los Angeles County Natural History Museum-approved inspector is to be on site to salvage scientifically significant fossil remains. The duration of these inspections depends on the potential for the discovery of fossils, the rate of excavation, and the abundance of fossils. Geological formations (like the Saugus Formation) with a high potential will initially require full time monitoring during grading activities. Geologic formations (like the Quaternary terrace deposits) with a moderate potential will initially require half-time monitoring. If fossil production is lower than expected, the duration of monitoring efforts should be reduced. Because of known presence of microvertebrates in the Saugus Formation, samples of at least 2,000 pounds of rock shall be taken from likely horizons, including localities 13, 13A, 14, and 23. These samples can be stockpiled to allow processing later to avoid delays in grading activities. The frequency of these samples will be determined based on field conditions. Should the excavations yield significant paleontological resources, excavation is to be stopped or redirected until the extent of the find is established and the resources are salvaged. Because of the long duration of the Specific Plan, a reassessment of the paleontological potential of each rock unit will be used to develop mitigation plans for subsequent subdivisions. The report shall include an itemized inventory of the fossils, pertinent geologic and stratigraphic data, field notes of the collectors and include recommendations for future monitoring efforts in those rock units. Prior to grading, an agreement shall be reached with a suitable public, non-profit scientific repository, such as the Los Angeles County Museum of Natural History or similar institution, regarding acceptance of fossil collections.	Applicant (Archaeologist)	LA County Natural History Museum- Approved Inspector Present During Grading Activities	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LA County Department of Regional Planning LA County Department of Regional Planning During Grading Activities in the Pico Formation, Saugus Formation, Quaternary Terrace Deposits, and Quaternary Older Alluvium

Mitigation Measures/Conditions of Approval 4.22 CULTURAL/PALEONTOLOGICAL RESOURCES (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.22-1. Although no other significant cultural resources were observed or recorded, all grading activities and surface modifications must be confined to only	Applicant (Archaeologist)	Construction Activity	1.	LA County Department of Regional Planning
those areas of absolute necessity to reduce any form of impact on unrecorded (buried) cultural resources that may exist within the confines of the project area. In the event that resources are found during construction		Stopped	2.	LA County Department of Regional Planning
the project area. In the event that resources are found during construction, activity shall stop and a qualified archaeologist shall be contacted to evaluate the resources. If the find is determined to be a historical or unique archaeological resource, contingency funding and a time allotment sufficient to allow for implementation of avoidance measures or appropriate mitigation should be available. Construction work may continue on other parts of the construction site while historical/archeological mitigation takes place, pursuant to Public Resources Code Section 21083.2(i).		Qualified Archaeologist Contacted	3.	During Grading Activities, as appropriate
LV 4.22-2. For archeological sites accidentally discovered during construction, there shall be an immediate evaluation of the find by a qualified archeologist. If	Applicant Construction (Archaeologist) Activity Stopped		1.	LA County Department of Regional Planning
the find is determined to be a historical or unique archeological resource, as defined under CEQA, contingency funding and a time allotment sufficient		2.	LA County Department of Regional Planning	
to allow for implementation of avoidance measures or appropriate mitigation shall be provided. Construction work may continue on other parts of the construction site while historical/archeological mitigation takes place, pursuant to Public Resources Code Section 21083.2(i).		Qualified Archaeologist Contacted	3.	During Grading Activities, as appropriate
4.23 CLIMATE CHANGE				
LV 4.23-1. All residential buildings on the project site that are enabled by approval of	Applicant	Plan Check	1.	LACDPW
the proposed project shall be designed to provide improved insulation and ducting, low E glass, high efficiency air conditioning units, and radiant			2.	LACDPW
barriers in attic spaces, as needed, or equivalent to ensure that all residential buildings operate at levels 15 percent better than the standards required by the version of Title 24 applicable at the time the building permit applications are filed.			3.	Prior to Issuance of Building Permits

	Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.23 CLIM	IATE CHANGE (cont.)				
LV 4.23-2.	All commercial and public buildings on the project site that are enabled by approval of the proposed project shall be designed to provide improved insulation and ducting, low E glass, high efficiency HVAC equipment, and energy efficient lighting design with occupancy sensors or equivalent to ensure that all commercial and public buildings operate at levels 15 percent better than the standards required by the version of Title 24 applicable at the time the building permit applications are filed.	Applicant	Plan Check	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Issuance of Building Permits
LV 4.23-3.	The project applicant or designee shall produce or purchase renewable electricity equivalent to the installation of one 2.0 kilowatt photovoltaic (i.e., solar) power system when undertaking the design and construction of each single-family detached residential unit on the project site that is enabled by approval of the proposed project; or, at the applicant's option, prior to commencing construction, the applicant shall secure offsets or credits for carbon dioxide equivalents from either the Climate Action Reserve of the California Climate Action Registry, the Chicago Climate Exchange, or similar reserve/exchange; or, alternatively, at the applicant's option, the applicant may pay to the South Coast Air Quality Management District (District) the equivalent amount of funds that would be due to buy credits from the Climate Action Reserve, Chicago Climate Exchange, or similar reserve/exchange for greenhouse gas emission mitigation purposes. In any case, installation of individual photovoltaic systems shall be considered when undertaking the design and construction of single-family residential units on the project site.	Applicant	Production of Payment to renewable electricity	1. 2. 3.	LACDPW LACDPW Prior to Issuance of Building Permits

Mitigation Measures/Conditions of Approval	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
4.23 CLIMATE CHANGE (cont.)				
LV 4.23-4. The project applicant or designee shall produce or purchase renewable electricity, equivalent to the installation of one 2.0 kilowatt photovoltaic (i.e., solar) power system on each 1,600 square feet of nonresidential roof area provided on the project site; or, at the applicant's option, prior to commencing construction, the applicant shall secure offsets or credits for carbon dioxide equivalents from either the Climate Action Reserve of the California Climate Action Registry, the Chicago Climate Exchange, or similar reserve/exchange; or, alternatively, at the applicant's option, the applicant may pay to the South Coast Air Quality Management District (District) the equivalent amount of funds that would be due to buy credits from the Climate Action Reserve, Chicago Climate Exchange, or similar reserve/exchange for greenhouse gas emission mitigation purposes. In any case, installation of individual photovoltaic systems shall be considered when undertaking the design and construction of nonresidential buildings on the project site.	Applicant	Production of Payment to renewable electricity	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW  Prior to Issuance of Building  Permits
LV 4.23-5. Consistent with the Governor's Million Solar Roofs Plan, the project applicant or designee, acting as the seller of any single-family residence constructed as part of the development of at least 50 homes that are intended or offered for sale, shall offer a solar energy system option to all customers that enter negotiations to purchase a new production home constructed on land for which a tentative subdivision map has been deemed complete. The seller shall disclose the total installed cost of the solar energy system option, and the estimated cost savings.	Applicant	Prior to Escrow Negotiations	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW  LACDPW  Prior to Entering into Escrow with Potential Single Family  Home Buyers

4.23 CLIM	Mitigation Measures/Conditions of Approval ATE CHANGE (cont.)	Party Responsible for Implementing Mitigation	Monitoring Action	1. 2. 3.	Enforcement Agency Monitoring Agency Monitoring Phase
LV 4.23-6.	The project applicant shall use solar water heating for all pools located at the Landmark Village recreation centers.	Applicant	Plan Check and Field Verification	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	LACDPW LACDPW Prior to Issuance of Buildin Permits for the Recreation Centers
LV 4.23-7.	The project applicant, in accordance with Los Angeles County requirements, will design and construct the approximately 11,000 square feet fire station so as to achieve LEED silver certification. <sup>2</sup>	Applicant	Plan Check	<ol> <li>2.</li> <li>3.</li> </ol>	LACDPW  LACDPW  Prior to Issuance of the Building Permit for the Fire Station

Impact Sciences, Inc.

8.0-191

LEED certification is a performance-oriented rating system whereby building projects earn points for satisfying criterion designed to address environmental impacts inherent in the design, construction, operation and management of building

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The documents listed below are incorporated by this reference and are available for public review and inspection upon request to either: (1) Samuel Dea, Los Angeles County, Department of Regional Planning, 320 W. Temple Street, 13<sup>th</sup> Floor, Los Angeles, California 90012-3225, (213) 974-6461; or (2) Tom Worthington, Impact Sciences, Inc., 803 Camarillo Springs Road, Suite A-1, Camarillo, California 93012, (805) 437-1900.

- Ambrose, R.F., J.C. Callaway, and S.F. Lee. 2006. An Evaluation of Compensatory Mitigation Projects Permitted Under Clean Water Act Section 401 by the California State Water Quality Control Board, 1991—2002. Prepared for California State Water Resources Control Board. August 2006.
- American Society for Testing and Materials (ASTM) Standard Practice for Environmental Site Assessments E 1527-00.
- American Society of Civil Engineers Urban Water Resources Research Council (ASCE) and U.S. Environmental Protection Agency (EPA), *International Stormwater Best Management Practices Database*, available at <a href="http://www.bmpdatabase.org/">http://www.bmpdatabase.org/</a> (2003).
- AOU (American Ornithologists' Union). 1998. Checklist of North American Birds. 7th ed. Washington, D.C.: American Ornithologists' Union.
- APLIC (Avian Power Line Interaction Committee). 2006. Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006. Pier Final Project Report CEC-500-2006-022. Washington, D.C. and Sacramento, California: Edison Electric Institute, APLIC, and the California Energy Commission.
- Aquatic Consulting Services, Inc., Aquatic Surveys Along the Santa Clara River Part I: Castaic Junction Project Area, Los Angeles County, California (April 2002).
- Aquatic Consulting Services, Inc., Aquatic Surveys along the Santa Clara River Part III: West of Commerce Center Bridge to the Ventura County Line, California (June 2002).
- Aquatic Consulting Services, Inc., Aquatic Surveys along the Santa Clara River Part IV: We Ventura County Line to Las Brisas Bridge, Ventura County, California, California (July 2002).
- Atwood, J.L. 1993. "California Gnatcatchers and Coastal Sage Scrub: The Biological Basis for Endangered Species Listing." In Proceedings of the Symposium: Interface between Ecology and Land Development in California, ed. J.E. Keeley, 149–170. Los Angeles, California: Southern California Academy of Sciences.

- Austin-Foust Associates, Inc., *Draft SR-126 Feasibility Study Traffic Analysis* (Santa Ana, California, July 2004).
- BA Environmental, Phase I Environmental Site Assessment of River Village Tentative Tract Map No. 53108, Highway 126, Newhall Ranch, California (September 27, 2004).
- Belluomini, L. 1980. "Status of Ringtail in California." California Department of Fish and Game, Non-Game Wildlife Investigations. Project Number W-54-R-12.
- Bennett, A.F. 2003. Linkages in the Landscape: The Role of Corridors and Connectivity in Wildlife Conservation. World Conservation Union.
- Bird Surveys Along the Santa Clara River, Mouth of Castaic Creek Downstream to Just Below Las Brisas Crossing, 2003.
- Bird Surveys Along a Portion of Castaic Creek Within the Proposed Castaic Mesa Project.
- Bird Surveys Along a Portion of the Santa Clara River and its Tributaries Upstream from the Castaic Creek Confluence, Near Valencia, California, 2003.
- Bird Surveys Along a Portion of the Santa Clara River and its Tributaries Upstream from the Castaic Creek Confluence, Near Valencia, California, 2002.
- Bird Surveys Along the Santa Clara River, Mouth of the Castaic Creek Downstream to Just Below Las Brisas Crossing. 2004.
- Bird Observations for Spring 2004 in the Proposed Potrero Valley, Long Canyon, Oak valley, and Onion Fields Development Areas, Near Valencia, California.
- Bird Observations in the Proposed Homestead and Chiquito Areas, Near Valencia, California. 2004.
- Bird Observations During 2004 at Castaic Junction, an Area on the north Side of the Santa Clara River at the Junction of SR-126 and I-5.
- Bird Surveys along a Portion of the Santa Clara River and its Tributaries Upstream from the Castaic Creek Confluence, Near Valencia California. 2004.
- Bird Observations for Spring 2004 in the Proposed Mesa East and West Development Near Valencia, California.

- Bird Observations in the Proposed Magic Mountain Entertainment Project Area, Near Valencia, California. 2004.
- Blake, T.F., EQFault, v.2.2, A Computer Program for the Deterministic Prediction of Peak Horizontal Acceleration from Digitized California Faults, User's Manual (1988–1999).
- Blake, T.F., FRISKSP, A Computer Program for the Probabilistic Estimation of Peak Acceleration and Uniform Hazard Spectra Using 3-D Faults as Earthquake Sources, User's Manual, 1995a (1995).
- Blake, T.F., Preliminary Fault-Data for EQFault and FRISKSP, 1995b (1995).
- Bledsoe, Brian P. and Chester C. Watson, *Effects of Urbanization on Channel Instability*, 37(2) Journal of American Water Resources Association 255–270 (2001).
- Bloom. Report on Arroyo Toad Surveys on Landmark Village, Newhall Land and Farming Company Property.

  November 15, 2007.
- Bloom Biological. Interim Report of Winter Surveys of Special-Status Bird Species on Portions of Newhall Land and Farming Company Property. February 28, 2008.
- Booth, Derek, Stream-Channel Incision Following Drainage-Basin Urbanization, 26 Water Resources Bulletin 407–417 (1990).
- Boyd, S. "Vascular Flora of the Liebre Mountains, Western Transverse Ranges, California." Aliso 18(2): 93–129. 1999.
- Brown, N.L. "California State University, Stanislaus Endangered Species Recovery Program." http://esrp.csustan.edu/speciespro. 1999.
- CalBiota Database, Version 2.0 (2005).
- California Air Resources Board. "California 1990 Greenhouse Gas Emissions Level and 2020 Limit," http://www.arb.ca.gov/cc/inventory/1990level/1990level.htm, 2008.
- California Air Resources Board. "Greenhouse Gas Sector Portal," http://www.arb.ca.gov/cc/ghgsectors/ghgsectors.htm#electric. 2008.
- California Air Pollution Control Officers Association, CEQA and Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, 2008.

- California Department of Conservation, *Farmland Map and Monitoring Program* (Pursuant to the Department of Conservation, Mapping Unit, the 2004 Los Angeles County Important Farmland Map is scheduled to be released to the public in January 2006) (2002).
- California Department of Fish and Game, *California's Wildlife*, Vol. I, Amphibians and Reptiles, California Statewide Habitat Relationship System (1988).
- California Department of Fish and Game, *California's Wildlife*, Vol. II, Birds, California Statewide Habitat Relationship System (1990).
- California Department of Fish and Game, *California's Wildlife*, Vol. III, Mammals, California Statewide Habitat Relationship System (1990).
- California Department of Fish and Game, *Special Animals*, California Statewide Habitat Relationship System (Sacramento, California, August 2004).
- California Department of Fish and Game, *Special Plants*, California Statewide Habitat Relationship System (Sacramento, California, August 2004).
- California Department of Transportation (Caltrans) District 7 Transportation Planning, Route Concept report, Route 5 (2000).
- California Department of Transportation, Guide for the Preparation of Traffic Impact Studies (December 2002).
- California Department of Transportation, Traffic Manual (July 1996).
- California Department of Transportation. Division of Transportation System Information, *California Motor Vehicle Stock, Travel and Fuel Forecast.* 2005.
- California Division of Mines and Geology (C.D.M.G.), Geology of Southern California: California Division of Mines and Geology, Bulletin 170, Map Sheet 6 (1954).
- California Division of Mines and Geology (C.D.M.G.), Seismic Hazard Zones Map of the Val Verde Quadrangle (Los Angeles, California, 2002).
- California Energy Commission, California's Summer 2004 Electrical Supply and Demand Outlook (June 2004).
- California Energy Commission, California's Water-Energy Relationship: Final Staff Report, 2005.

- California Energy Commission. "2008 Building Codes Standards," http://www.energy.ca.gov/title24/2008standards/index.html. 2009.
- California Energy Commission. Refining Estimates of Water-Related Energy Use in California. 2006.
- California Energy Commission. Summary of the 2007 Integrated Energy Policy Report. 2008.
- California Energy Commission. The Role Of Land Use In Meeting California's Energy And Climate Change Goals. 2009.
- California Gas and Electric Utilities. 2008 California Gas Report. 2008.
- California Environmental Protection Agency. Climate Action Team Report to Governor Schwarzenegger and the Legislature. March 2006.
- California Energy Commission. "State Alternative Fuels Plan," http://www.energy.ca.gov/2007 publications/CEC-600-2007-011/CEC-600-2007-011-CMF.PDF. 2008.
- California Integrated Waste Management Board, *Jurisdiction Diversion and Disposal Profile: Los Angeles County*, available at http://www.ciwmb.ca.gov/Profiles (February 27, 2009).
- California Native Plant Society, Electronic Inventory of Rare and Endangered Vascular Plants of California, (2004) (Records of Occurrence for: Val Verde, Newhall, Warm Springs Mountain, Whitaker Peak, Cobblestone Mountain, Piru, Simi Valley West, Simi Valley East and Oat Mountain U.S. Geological Survey (USGS) 7.5-minute quadrangle maps).
- California Regional Water Quality Control Board, Los Angeles Region, Water Quality Control Plan (Basin Plan) [for the] Los Angeles Region (4), Monterey Park, California: California Regional Water Quality Control Board (Approved February 23, 1995).
- California Regional Water Quality Control Board, Los Angeles Region, Order No. 01-182, NPDES Permit No. CAS004001, Waste Discharge Requirements for Municipal Storm Water and Urban Runoff Discharges within the County of Los Angeles and the Incorporated Cities Therein, Except the City of Long Beach (2001).
- California Stormwater Quality Association (CASQA), Stormwater Best Management Practices Handbook New Development and Redevelopment (2003).
- California Stormwater Quality Task Force (CASQTF), California Stormwater Best Management Practices Handbook – Industrial/Commercial (1993).

- CAS (California Academy of Sciences). California Academy of Sciences Department of Herpetology Collections Catalogue. 2003.
- Casey R. and Klaine, S., Nutrient Attenuation by a Riparian Wetland During Natural and Artificial Runoff Events, 30 Journal of Environmental Quality 1720 (2001).
- Castaic Lake Water Agency, Santa Clarita Water Division. Final SWP SB 610 Water Supply Assessment for the Skyline Project. September 2008.
- Castaic Lake Water Agency, et al., Groundwater Perchlorate Contamination Amendment and Other Amendments and the 2000 Urban Water Management Plan (January 2005).
- Castaic Union School District, Telephone communication from Jamie Garcia to Impact Sciences, Inc. (June 24, 2004).
- CDFG (California Department of Fish and Game). The Status of Rare, Threatened, and Endangered Plants and Animals of California 2000–2004. 2005.
- Center for Watershed Protection, The Practice of Watershed Protection (2000).
- Chow, V.T., Open Channel Hydraulics, (McGraw Hill Civil Engineering Series, 1959).
- City of Santa Clarita and Austin-Foust Associates, Inc., Santa Clarita Valley Consolidated Traffic Model Version 3.3 (April 2003).
- City of Santa Clarita and Los Angeles County Department of Public Works, Santa Clarita Valley Consolidated Traffic Model 1995 Update and Validation (June 1995).
- City of Santa Clarita, Santa Clarita Valley Consolidated Traffic Model, 2002 Update and Validation (November 2002).
- CNPS. "Inventory of Rare and Endangered Plants." Online edition, version 7-07c. Revised July 9, 2007; accessed September 10 to November 1, 2007. http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi. 2007.
- Compliance Biology. Results of Focused Western Spadefoot Toad Surveys.
- Compliance Biology. Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians.
- Compliance Biology and Bruyea. Results of Butterfly Surveys on the Newhall Ranch Project Site.

- County of Los Angeles. Municipal Code. Section 22.72.030. "Establishment of Library Facilities Fees."
- County of Los Angeles. Oak Tree Ordinance. Los Angeles, California County Code; Municipal Codes, Title 22, Chapter 56, Part 16: Oak Tree Permits, Sections 2050 et seq. 1988.
- County of Los Angeles Fire Department, Correspondence from P. Michael Freeman to Julie Berger, Impact Sciences, Inc. (August 2, 2004).
- County of Los Angeles Fire Department, Correspondence from P. Michael Freeman to Rose Mamaghani, Impact Sciences, Inc. (December 31, 2002).
- County of Ventura. Ventura County Non-Coastal Zoning Ordinance. Article 7, Section 8107-25: Tree Protection Regulations. Added by ORD. 3993 in February 1992.
- County Sanitation Districts of Los Angeles County. Final 2015 Santa Clarita Valley Joint Sewerage System Facilities EIR, January 1998.
- Craig, D., and P.L. Williams. "Willow Flycatcher (Empidonax traillii)." California Partners in Flight Riparian Bird Conservation Plan. Accessed February 8, 2008. http://www.prbo.org/calpif/htmldocs/riparian\_v-2.html. 1998.
- Crooks, K.R., and M.E. Soulé. "Mesopredator Release and Avifaunal Extinctions in a Fragmented System." Nature 400:563–566. 1999.
- Currier, P. "Felis concolor." Mammalian Species 200:1–7. 1983.
- Dames & Moore, Biological Resources of the Upland Areas of West Ranch (Santa Barbara, California, 1993).
- Davis, F.W., P.A. Stein, and D.M. Stoms. "Distribution and Conservation Status of Coastal Sage Scrub in Southwestern California." Journal of Vegetation Science 5:743–756. 1994.
- Defour, A.P., Health Effects Criteria for Fresh Recreational Waters, U.S. Environmental Protection Agency 600/1-84-004) (1984).
- Department of Land and Water Conservation (DLWC). DRAFT: Department of Land and Water Conservation "The Manager's Guide to: Sediment, Nutrients, and Gross Pollutant Control" (Resource Management Division, Sydney, Australia, 1st Ed 1996.)
- Department of Water Resources. Draft State Water Project Delivery Reliability Report. December 2009.

Department of Water Resources. 2002 Semitropic Groundwater Storage Program and Point of Delivery Agreement Among the Department of Water Resources of the State of California, CLWA and Kern County Water Agency (2002).

Department of Water Resources. The State Water Project Delivery Reliability Report, Final (2007).

Devore, J.L. *Probability and Statistics for Engineering and the Sciences* (Brooks/Cole Publishing Co., Pacific Grove, 4th ed. California, 1995).

Dibblee, T.W., Jr., *Dibblee Geological Foundation Map #DF-50: Geological Map of the Val Verde Quadrangle* (Los Angeles County, California, 1993).

Donaldson, B.M. *The Use of Highway Underpasses by Large Mammals in Virginia and Factors Influencing Their Effectiveness.* Virginia Transportation Research Council, Charlottesville, VA, VTRC 06-R2. 2005.

Dudek. Newhall Ranch High Country Specific Management and Salt Creek Area Biological Resources Technical Report.

Dudek. Sensitive Plant Survey Results. 2002.

Dudek. Sensitive Plant Survey Results. 2004.

Dudek. Sensitive Plant Survey Results. 2005.

Dudek. 2003 Sensitive Plant Survey Results for Newhall Ranch Specific Plan Area. June 2004.

Dudek. 2003 Sensitive Plant Survey Results for the Salt Creek Site. June 2004.

Dudek. 2005 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area. June 2006.

Dudek. 2006 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area. October 2006.

Dudek. High Country and Salt Creek Oak Woodland Sampling and Tree Population Estimation. January 10, 2007.

Dudek. 2007 Sensitive Plant Survey Results for the Newhall Ranch Specific Plan Area. December 2007

Ecological Sciences, Inc. Letter from Scott Cameron to Mark Subbotin, Newhall Ranch Co, Valencia, California (Subject: Results of focused arroyo toad surveys, Auto Center Expansion Project and Hart Baseball and Softball Complex (Hart Complex Area) Santa Clarita, California).

- Ecological Sciences, Inc. Letter from Scott Cameron to Rick Farris, U.S. Fish and Wildlife Service, Ventura, California (Subject: Permit submittal requirements, TE 808242, arroyo toad surveys, Los Angeles County, California) (dated August 2, 2001).
- Ecological Sciences, Inc. Results of Focused Arroyo Toad Surveys, Castaic Creek, Santa Clarita, California. August 17, 2005.
- Ecological Sciences, Inc. Results of Focused Arroyo Toad Surveys, San Francisquito Creek, Santa Clarita, California. August 21, 2005.
- Ecosciences. Arroyo Toad Letter Report.
- Ehlig, P.L., "History, Seismicity and Engineering Geology of the San Gabriel Fault" in *Geology, Seismicity* and Environmental Impact: Association of Engineering Geologists Special Publication (October 1973).
- Emmel, T.C., and J.F. Emmel. *The Butterflies of Southern California*. The Natural History Museum of Los Angeles County Sciences Series 26. 1973.
- England and Nelson Environmental Consultants, Los Angeles County Significant Ecological Area Study (Prepared for the Los Angeles County Department of Regional Planning and Environmental Systems Research Institute) (1976).
- ENTRIX, Inc. Focused Special-Status Aquatic Species Assessment, Santa Clara River Landmark Village Project, Newhall Ranch, California. September 25, 2007.
- ENTRIX, Inc., Sensitive Aquatic Species Assessment, Santa Clara River, Landmark Village Project (Santa Clarita, California, June 2005).
- Environmental Defense Sciences, Memorandum from Susan Paulson and John List of Environmental Defense Sciences to Dan Hedigan and Sat Tamaribuchi of the Irvine Company regarding preliminary review of Northern Sphere Area Draft EIR (dated February 20, 2002).
- EPA (Environmental Protection Agency) and U.S. Army (U.S. Department of the Army). 1990. Memorandum of Agreement between the Environmental Protection Agency and the Department of the Army Concerning the Determination of Mitigation under the Clean Water Act Section 404(b)(1) Guidelines. February 6, 1990.
- Federal Emergency Management Agency (FEMA), Flood Insurance Map 065043-0340 (October 20, 2002).
- First Annual Western Spadefoot Toad Habitat Monitoring Report.

- Finch, D.M., J.F. Kelly, and J-L.E. Cartron. "Migration and Winter Ecology." In *Status, Ecology, and Conservation of the Southwestern Willow Flycatcher*, ed. D.M. Finch and Fish and Game Code. California Fish and Game Commission. http://www.leginfo.ca.gov/cgi-bin/calawquery?codesection=fgc&codebody=&hits=20. 2000.
- Fleisher, et al.. Marine Waters Contaminated with Domestic Sewage: Noneteric Illnesses Associated with Bather Exposure in the United Kingdom, 86 American Journal of Public Health 1228–1234 (1996).
- FLx. Rare Plant Surveys, Newhall Ranch Specific Plan Project Sites (Los Angeles, California, September 2002).
- FLx. Sensitive Plant Species Surveys. 2002.
- FLx. Sensitive Plant Species Surveys. 2004.
- Flx. Rare Plant Survey for *Helianthus* sp., Castaic Junction, Los Angeles County, California. November 2002.
- Flx. Sensitive Plant Species Surveys at the Magic Mountain Entertainment Site Fireworks Area. May 8, 2004.
- Flx. Sensitive Plant Species Surveys at the Magic Mountain Entertainment Site Fireworks Area. May 7, 2005.
- Flx. Sensitive Plant Species Surveys at the Magic Mountain Entertainment Site Fireworks Area. May 7, 2006
- Flx. Sensitive Plant Species Survey for the Potrero Irrigation Project. April 25, 2006.
- FORMA, Newhall Ranch Specific Plan (May 2003).
- Garrett, K., and J. Dunn. *The Birds of Southern California: Status and Distribution*. Los Angeles Audubon Society. 1981.
- GBB Solid Waste Management Consultants, Approaching an Integrated Solid Waste Management System for Los Angeles County, California (May 2, 1997).
- GeoSyntec Consultants, Hydromodification Management Plan Literature Review, Santa Clara Valley Urban Runoff Pollution Prevention Program (2002).
- GeoSyntec Consultants, Hydromodification Management Plan, Santa Clara Valley Urban Runoff Pollution Prevention Program (2004).

- Grant, S.B. et al., Generation of Enterococci Bacteria in a Coastal Saltwater Marsh and Its Impact on Surf Zone Water Quality, 35 Environmental Science & Technology 2407–2416 (2001).
- Grantham, J. Personal communication regarding foraging activities of condor in the Santa Clara River watershed. From J. Grantham to C. Huntley (Aspen), March 25, 2009.
- Grinnel, J. and A.H. Miller, *The Distribution of the Birds of California*, Cooper Ornithological Club, Pacific Coast Avifauna Number 27 (Berkeley, California, 1944).
- GSI Water Solutions, Inc. Assessment of Future Surface Water Conditions in the Dry Gap of the Santa Clara River. Prepared for Newhall Land and Farming Company. April 2008.
- Guthrie, D.A., Bird Surveys along the Santa Clara River and its Tributaries, Near Valencia, California, 1998a (W.M. Keck Science Center, Clairemont, California, 1998).
- Guthrie, D.A., Bird Surveys along the Santa Clara River, Castaic Creek Downstream to Below Las Brisas Crossing, 1998b (W.M. Keck Science Center, Clairemont, California, 1998).
- Guthrie, D.A., Bird Surveys along the Santa Clara River, Ventura County Line Downstream to Below Las Brisas Crossing, 1999a (W.M. Keck Science Center, Clairemont, California, 1998).
- Guthrie, D.A., Bird Surveys in the Proposed Riverwood Project Area, Near Valencia, California (W.M. Keck Science Center, Clairemont, California, 1999).
- Guthrie, D.A., Bird Surveys in the Proposed Riverwood Project Area, Near Valencia, California, 1999a (W.M. Keck Science Center, Clairemont, California, 1999).
- Guthrie. Status of the Least Bell's Vireo along the Santa Clara River and Its Tributaries near Valencia, California, Spring 1989; July 5, 1989.
- Guthrie. Birds along the Santa Clara River and Its Tributaries near Valencia, California, with Special Reference to Least Bell's Vireo, Spring 1990; July 26, 1990.
- Guthrie. Surveys for Least Bell's Vireo Along the Santa Clara River and Its Tributaries near Valencia; May 22, 1991.
- Guthrie. Surveys along Castaic Creek for Least Bell's Vireo; May 22, 1991.
- Guthrie. Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California. July 31, 1992.

- Guthrie. Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California. August 3, 1993.
- Guthrie. Bird Surveys along the Santa Clara River, 1993; Castaic Creek Downstream to just below Newhall Ranch. August 4, 1993.
- Guthrie. Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California. July 5, 1994.
- Guthrie. Bird Surveys along the Santa Clara River, 1994; Castaic Creek Downstream to just below Las Brisas Crossing. July 5, 1994.
- Guthrie. Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1995. July 12, 1995.
- Guthrie. Bird Surveys along the Santa Clara River, 1995; Castaic Creek Downstream to just below Las Brisas Crossing. July 13, 1995.
- Guthrie. Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1996. July 10, 1996.
- Guthrie. Bird Surveys along the Santa Clara River, 1996; Castaic Creek Downstream to just below Las Brisas Crossing. July 11, 1996.
- Guthrie. Bird Surveys along the Santa Clara River and Its Tributaries near Valencia, California, 1997. June 23, 1997.
- Guthrie. Bird Surveys along the Santa Clara River, 1997; Castaic Creek Downstream to just below Las Brisas Crossing. June 23, 1997.
- Guthrie. Bird Surveys along the Santa Clara River, 1998; Castaic Creek Downstream to just below Las Brisas Crossing. July 28, 1998.
- Guthrie. Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 1999. August 26, 1999.
- Guthrie. Bird Surveys in the Proposed Riverwood Project Area, near Valencia, California. August 26, 1999.
- Guthrie. Bird Surveys along the Santa Clara River, 1999; Ventura County Line Downstream to just below Las Brisas Crossing. August 26, 1999.

- Guthrie. Bird Surveys along the Santa Clara River, 2000; Mouth of Castaic Creek Downstream to the Los Angeles/Ventura County Line. August 2, 2000.
- Guthrie. Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2000. August 2, 2000.
- Guthrie. Bird Surveys along the Santa Clara River; Los Angeles/Ventura County Line Downstream to just below Las Brisas Crossing. August 2, 2000.
- Guthrie. Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2001. September 14, 2001.
- Guthrie. Bird Surveys along the Santa Clara River, 2001; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing. September 14, 2001.
- Guthrie. Bird Surveys along the Santa Clara River, 2002; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing. August 16, 2002
- Guthrie. Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2005. October 5, 2005.
- Guthrie. Bird Surveys along the Santa Clara River, 2005; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing. July 21, 2005.
- Guthrie. White-Tailed Kite Populations along the Upper Santa Clara River. July 26, 2005.
- Guthrie. Bird Surveys along the Santa Clara River, 2006; Mouth of Castaic Creek Downstream to just below Las Brisas Crossing. October 11, 2006.
- Guthrie. Bird Surveys of The Old Road Phase III Environmental Project Study Area, near Valencia, California, 2006. July 20, 2006.
- Guthrie. Bird Surveys along a Portion of the Santa Clara River and Its Tributaries Upstream from the Castaic Creek Confluence, near Valencia, California, 2006. October 11, 2006.
- Haglund, Thomas R. and Jonathan N. Baskin, Current Status of the Unarmored Threespine Stickleback (Gasterosteus aculeatus williamsoni) along Portions of the Santa Clara River Drainage (May 1, 1989).
- Haglund, Thomas R. and Jonathan N. Baskin, Final Report: Sensitive Aquatic Species Survey, Santa Clara River and San Francisquito Creek, Newhall Land and Farming Company Property, Los Angeles, California (December 1995).

- Haglund, Thomas R. and Jonathan N. Baskin, Fish and Wildlife Survey and Habitat Assessment of the Santa Clara River and Interstate 5 (October 2000).
- Hammer, Thomas R., Stream and Channel Enlargement Due to Urbanization, 8 Water Resources Research 1530–1540 (1972).
- Hart, E.W., "Fault-Rupture Hazard Zones in California," in California Division of Mines and Geology Special Publication 42, (1999).
- Helsel, D.R. and R.M. Hirsch, Statistical Methods in Water Resources in U.S. Geological Survey, Techniques of Water-Resources Investigations, Book 4, Chapter A3, Water Resources Division, USGS (Reston, Virginia, 2002).
- Helsel, D.R. and T.A. Cohn, Estimation of Descriptive Statistics for Multiply Censored Water Quality Data, Water Resources Research 24 (1988).
- Hendriks, R. *Technical Noise Supplement: A Technical Supplement to the Traffic Noise Analysis Protocol*, California Department of Transportation (Caltrans) (Sacramento, California, October 1998).
- Hermanson, J.W., and T.J. O'Shea. "Antrozous pallidus." American Society of Mammalogists.

  Mammalian Species, 213:1–8. 1983.
- Herrera Environmental Consultants (HEC), and Northwest Hydraulic Consultants (NHC), *Discharge of Stormwater to High Order Streams: Determining Exempt Reaches* (Prepared for Washington State Department of Transportation) (Olympia, Washington, 2004).
- Hewitt, Basil <BHewitt@lacsd.org>. "Conversation: SCVJJ Information." August 15, 2005. Minta Schaefer <a href="mailto:schaefer@impactsciences.com">schaefer@impactsciences.com</a>>.
- Hickman, James C., *The Jepson Manual: Higher Plants of California* (University of California Press, Berkeley, California, 1993).
- Hirsch, R.M. and J.R. Stedinger, *Plotting Positions for Historical Floods and Their Precision*, Water Resources Res. 23(4) (1987).
- Holland, R.F., *Preliminary Descriptions of the Terrestrial Natural Communities of California*, Non-game Heritage Program (California Department of Fish and Game, Sacramento, California, 1986).
- Hollis, G.E., The Effect of Urbanization on Floods of Different Recurrence Intervals, 11(3) Water Resources Research 431–435 (1975).

- Impact Sciences, Inc., 1996–1999 Newhall Ranch Specific Plan and WRP Final EIR (SCH No. 1995011015),
  Draft EIR for the Newhall Ranch Specific Plan and WRP (Text, Figures/Tables), Volumes I and II
  (Appendices), and Geotechnical Appendix 4.1 (oversized maps) (July 1996).
- Impact Sciences, Inc., 1996–1999 Newhall Ranch Specific Plan and WRP Final EIR (SCH No. 1995011015), Final EIR for the Newhall Ranch Specific Plan and WRP, Volumes I–IV (Comments, Responses, etc.) (November 1997), and Volumes V-VI (Comments, Responses, etc.) (March 1999).
- Impact Sciences, Inc., 1996–1999 Newhall Ranch Specific Plan and WRP Final EIR (SCH No. 1995011015), Revised Draft EIR for the Newhall Ranch Specific Plan and WRP (March 8, 1999).
- Impact Sciences, Inc., 2000–2003 Newhall Ranch Final Additional Analysis (SCH No. 1995011015) Draft Additional Analysis, Volume I (Text, Figures/Tables) and Volumes II–III (Appendices) (April 2001).
- Impact Sciences, Inc., 2000–2003 Newhall Ranch Final Additional Analysis, Final Additional Analysis, Volume I (Comments and Responses, etc.) and Volume II (Appendix) (October 2001).
- Impact Sciences, Inc., 2000–2003 Newhall Ranch Final Additional Analysis, Revised Draft Additional Analysis, Volume I (Text, Figures/Tables/Appendix) and Volume II (Appendix) (November 2002).
- Impact Sciences, Inc., 2000–2003 Newhall Ranch Final Additional Analysis, Final Additional Analysis, Volume III (Comments and Responses, etc.) and Volume IV (Appendix) (March 2003).
- Impact Sciences, Inc., 2000–2003 Newhall Ranch Final Additional Analysis, Revised Additional Analysis, Volume V (Revised Text, Figures, and Tables) (March 2003).
- Impact Sciences, Inc., 2000–2003 Newhall Ranch Final Additional Analysis, Final Additional Analysis, Volume VI (Comments and Responses, etc.) and Volume VII (Appendix) (May 2003).
- Impact Sciences, Inc., Landmark Village Biota Report (Prepared for Los Angeles County Department of Regional Planning) (Los Angeles, California, June 2005).
- Impact Sciences, Inc., Letter from David Crawford to Mark Subbotin, Newhall Land and Farming (Subject: Brief summary of arroyo toad survey results in NRMP area) (dated June 18, 2001).
- Impact Sciences, Inc., Results of Focused Surveys for Arroyo Toad and Special-Status Aquatic Reptiles and Amphibians within the Natural River Management Plan Area (Valencia, California, September 2001).

- Impact Sciences, Inc. Assessment and Survey of Mammals within the Newhall Ranch Specific Plan Area. May 2005.
- Institute of Transportation Engineers, Trip Generation, 6th ed. 1997.
- Institute of Transportation Studies, University of California, Davis. *Transportation Project-Level Carbon Monoxide Protocol.* 1997.
- Intergovernmental Panel on Climate Change. IPCC Guidelines for National Greenhouse Gas Inventories, Volume 4, Agriculture, Forestry and Other Land Uses. 2006.
- Intergovernmental Panel on Climate Change, Climate Change 2007: Impacts, Adaptation and Vulnerability, 2007.
- James, W. and R.C. James, *Hydrology: A Guide to the Rain, Temperature and Runoff Modules of the USEPA SWMM4* (Computational Hydraulics International, Ontario, Canada, 2000).
- Jameson, E.W. and H.J. Peters, *Mammals of California*, California Natural History Guides (University of California Press, 2004).
- Jennings, C.W., California Division of Mines and Geology, Geological Data Map No. 6: Fault Activity Map of California and Adjacent Areas. 1994.
- Jennings, G., et al., Neuse River Basin Pollution Sources and Best Management Practices (Proceedings from the AWRA Specialty Conference on Coastal Water Resources), available at http://www.bae.ncsu.edu/people/faculty/Jennings/ (New Orleans, Louisiana, 2002).
- Jennings, M.R., and M.P. Hayes. Amphibian and Reptile Species of Special Concern in California. Final report submitted to the California Department of Fish and Game, Rancho Cordova, California. Contract 8023. 1994.
- Johnson. Bat Survey for the Newhall Ranch, Valencia, California, August 7-10, 2006. October 10, 2006
- Jiang, S. et al., Human Adenoviruses and Coliphages in Urban Runoff-Impacted Coastal Waters of Southern California, 67 Applied and Environmental Microbiology 179 (2001).
- Katznelson, R. and T. Mumley, *Diasinon in Surface Waters in San Francisco Bay Area: Occurrence and Potential Impact* (Prepared for California State Water Resources Control Board and Alameda County Clean Water Program) (1997).
- Kennedy/Jenks Consultants, CLWA Capital Improvement Program (2003).

- Kew, W.S.W., "Geology and Oil Resources of a Part of Los Angeles and Ventura Counties, California," in U.S. Geological Survey Bulletin 753 (1924).
- Krebbs, Mark E., PACE, Fountain Valley, California, correspondence to Glenn Adamick at Newhall Land. (May 8, 2006).
- Krebbs, Mark E., PACE, Fountain Valley, California, correspondence to Glenn Adamick at Newhall Land. (May 9, 2006).
- Landmark Village Oak Tree Report.
- Los Angeles County Department of Public Works (LACDPW), 2002 Annual Report on the Source Reduction and Recycling Element, Household Hazardous Waste Element, and Nondisposal Facility Element for the County of Los Angeles Unincorporated Areas (February 2004).
- Los Angeles County Department of Public Works (LACDPW), Comment Letter from the County of Los Angeles Department of Public Works to the Los Angeles Regional Water Quality Control Board (September 18, 2001).
- Los Angeles County Department of Public Works (LACDPW), Development Planning for Storm Water Management, A Manual for the Standard Urban Storm Water Mitigation Plan (SUSMP) (September 2002).
- Los Angeles County Department of Public Works (LACDPW), *Hydrology Manual & Appendix* (December 1991).
- Los Angeles County Department of Public Works (LACDPW), Level of Flood Protection and Draining Protection Standards (1986).
- Los Angeles County Department of Public Works (LACDPW), Los Angeles County Integrated Waste Management Plan, 2002 Annual Report on the Countywide Summary Plan and Countywide Siting Element, (February 2004).
- Los Angeles County Department of Public Works (LACDPW), Los Angeles County 1994–2000 Integrated Receiving Water Impacts Report (Los Angeles, California, 2000).
- Los Angeles County Department of Public Works (LACDPW), Los Angeles County 2000–2001 Stormwater Monitoring Report (Los Angeles, California, 2001).
- Los Angeles County Department of Public Works (LACDPW), Los Angeles County 2002–2003 Stormwater Monitoring Report (Los Angeles, California, 2003).

January 2010

- Los Angeles County Department of Public Works (LACDPW), Sedimentation Manual (June 1993).
- Los Angeles County Department of Public Works (LACDPW), Technical Manual for Stormwater Best Management Practices in the County of Los Angeles (Los Angeles, California, 2004).
- Los Angeles County Department of Public Works (LACDPW), Telecommunication with Carlos Ruiz, Supervising Civil Engineer III, Head, Planning Section, Environmental Programs Division, County of Los Angeles Department of Public Works (dated July 15, 2003).
- Los Angeles County Department of Public Works (LACDPW), Telecommunication with Kay Krumwied, Lancaster Landfill (dated December 4, 2002).
- Los Angeles County Department of Public Works (LACDPW), Traffic Impact Analysis Report Guidelines (January 1, 1997).
- Los Angeles County Department of Public Works (LACDPW), Written correspondence from Rod Kubomoto, Watershed Management Division, County of Los Angeles Department of Public Works (April 21, 2004).
- Los Angeles County Department of Public Works, Santa Clara River Enhancement and Management Plan, Flood Protection Report, Final Draft (June 1996).
- Los Angeles County Department of Regional Planning, County of Los Angeles General Plan (Los Angeles, California, January 1993).
- Los Angeles County Department of Regional Planning, County of Los Angeles General Plan "Housing Element" (Los Angeles, California, November 1989).
- Los Angeles County Department of Regional Planning, County of Los Angeles General Plan "Noise Element" (Los Angeles, California, November 17, 1987).
- Los Angeles County Department of Regional Planning, *County of Los Angeles General Plan* "Safety Element" (Los Angeles, California, December 1990).
- Los Angeles County Department of Regional Planning, *County of Los Angeles General Plan* "Safety Element" Technical Appendix: Hazard Reduction in Los Angeles County (Leighton and Associates and Sedway Cooke Associates) (Los Angeles, California, December 1990).
- Los Angeles County Department of Regional Planning, County of Los Angeles General Plan "Scenic Highway Element" (Los Angeles, California, November 17, 1987).

January 2010

- Los Angeles County Department of Regional Planning, *County of Los Angeles General Plan* "Seismic Safety Element" (Los Angeles, California, November 17, 1987).
- Los Angeles County Department of Regional Planning, Environmental Document Reporting Procedures and Guidelines, as amended (Los Angeles, California, November 17, 1987).
- Los Angeles County Department of Regional Planning, Frank Hovore & Associates, San Marino Environmental Associates, Planning Consultants Research, SEATAC Biota Report, Combined San Francisquito Canyon Projects (West Creek (VTTM 52455) and East Creek (VTTM 44831, 52667), Newhall Land and Farming Company, Significant Ecological Area 19, San Francisquito Canyon) (Los Angeles County, California, August 19, 1998).
- Los Angeles County Department of Regional Planning, Newhall Ranch Specific Plan Biota Report (Los Angeles, California, September 1995, revised July 1996).
- Los Angeles County Department of Regional Planning, *Santa Clarita Valley Area Plan* (Los Angeles, California, Adopted by the Board of Supervisors February 16, 1998; Comprehensive Update December 6, 1990).
- Los Angeles County Department of Regional Planning, Service Provider Report (April 23, 2003).
- Los Angeles County Department of Regional Planning, Telephone Interview with Julie Striplin Lowry, Senior Regional Planning Assistant (March 17, 2003).
- Los Angeles County Fire Department, E-mail Communication with Debbie Aguirre, Supervising Planning Analyst, Planning Division (dated May 17, 2004).
- Los Angeles County Fire Department, Fuel Modification Plan Guidelines for Projects Located in Fire Zone 4 or Very High Fire Hazard Severity Zones (Los Angeles, California, 1998).
- Los Angeles County Fire Department, Telephone Communication with Danny Kolker, Planning Analyst, Planning Division (February 5, 2004).
- Los Angeles County Fire Department, Telephone Communication with Danny Kolker, Planning Analyst, Planning Division (September 29, 2004).
- Los Angeles County Fire Department, Telephone Communication with Assistant Chief Frank Vidales (October 12, 2004).
- Los Angeles County Fire Department, Written Correspondence with David R. Leininger, Chief, Forestry Division, Prevention Division (dated November 12, 2002).

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- Los Angeles County Fire Department, Written Correspondence with David R. Leininger, Chief, Forestry Division, Prevention Division (dated April 18, 2003).
- Los Angeles County Metropolitan Transportation Authority, 2002 Congestion Management Program for Los Angeles County (June 2002).
- Los Angeles County, Additional CEQA Findings and Statement of Overriding Considerations Regarding the Newhall Ranch Final Additional Analysis to the Partially Certified Final EIR for the Newhall Ranch Specific Plan And Water Reclamation Plant (May 2003).
- Los Angeles County, Conditional Use Permit No. 94-087-(5) Conditions Of Approval (May 27, 2003).
- Los Angeles County, Conditional Use Permit No. 94-087-(5)/Findings Of The Board Of Supervisors And Order (May 27, 2003).
- Los Angeles County, Mitigation Monitoring Plan for the Newhall Ranch Specific Plan (May 2003).
- Los Angeles County, Mitigation Monitoring Plan for the WRP (May 2003).
- Los Angeles County, Newhall Ranch Specific Plan, Volumes I and II (Adopted May 27, 2003).
- Los Angeles County, Planning and Zoning Code; Title 22 of the Los Angeles County Code (Los Angeles, California, 1986 ed.).
- Los Angeles County, Resolution of the Board of Supervisors of the County of Los Angeles Relating to Adoption of Los Angeles County General Plan Amendment 94-087-(5) Santa Clarita Valley Area Plan Amendment 94-087-(5) Newhall Ranch Specific Plan (May 27, 2003).
- Los Angeles County, Vesting Tentative Parcel Map No. 24500.
- Los Angeles County, Zoning Case No. 94-087(5)/Ordinance No. 2003-0031Z (May 27, 2003).
- Los Angeles Regional Water Quality Control Board (LARWQCB), Los Angeles County 2002–2003 Stormwater Monitoring Report, available at <a href="http://ladpw.org/WMD/npdes/2002\_03\_report/">http://ladpw.org/WMD/npdes/2002\_03\_report/</a> (2003).
- Los Angeles Regional Water Quality Control Board (LARWQCB), Resolution 01:018: Amendment to the Water Quality Control Plan for the Los Angeles Region to Update Bacteria Objectives for Water Bodies Designated for Water Contact Recreation (October 25, 2001).

- Los Angeles Regional Water Quality Control Board (LARWQCB), Resolution 03:008: Revision of interim waste load allocations for chloride in the Amendment to the Water Quality Control Plan for the Los Angeles Region to include a TMDL for Chloride in the Upper Santa Clara River (July 10, 2003).
- Los Angeles Regional Water Quality Control Board (LARWQCB), Resolution 03:011: Amendment to the Water Quality Control Plan for the Los Angeles Region to include a TMDL for Nitrogen Compounds in the Santa Clara River (August 7, 2003).
- Los Angeles Regional Water Quality Control Board (LARWQCB), Water Quality Control Plan Los Angeles Region, as amended (1994).
- Los Angeles Regional Water Quality Control Board (LARWQCB), Water Quality Control Plan Los Angeles Region Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (1995).
- Los Angeles Regional Water Quality Control Board (LARWQCB), Wet-Weather Bacterial TMDL for Santa Monica Bay Beaches, Res. No. 2002-022, Attachment A (2002).
- Los Angeles Unified School District Integrated Pest Management Procedures Manual (October 2000).
- Luhdorff & Scalmanini Consulting Engineers, *Santa Clarita Valley Water Report* 2002 (Prepared for CLWA, Los Angeles County Waterworks District # 36, Newhall County Water District, and Valencia Water District) (April 2003).
- Luhdorff & Scalmanini Consulting Engineers, *Santa Clarita Valley Water Report* 2003 (Prepared for CLWA, Los Angeles County Waterworks District # 36, Santa Clarita Water Division of CLWA, and Valencia Water District) (May 2004).
- MacRae, C.R., The Role of Moderate Flow Events and Bank Structure in the Determination of Channel Response to Urbanization (Proceedings of the 45th Annual Conference of the Canadian Water Resources Evaluation: Resolving Conflicts and Uncertainty in Water Management) (Shrubosle, Dan ed., 1992).
- Maidment, D.R. (ed.), Handbook of Hydrology (McGraw-Hill Inc., New York, New York, 1993).
- Marzluff, J.M., S.T. Knick, M.S. Vekasy, L.S. Schueck, and T.J. Zarriello. 1997. "Spatial Use and Habitat Selection of Golden Eagles in Southwestern Idaho." Auk 114:673–687.

- McMurray, N.E. 1990. "Prunus ilicifolia." Fire Effects Information System. U.S. Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory. Accessed December 11, 2007. http://www.fs.fed.us/database/feis/
- MEC, Mission Bay Clean Beaches Initiative Final Report (2004).
- Mendioroz, R. Fueling Change: A Number of Design Schemes and Alternative-Energy Strategies Can Help Operators Beat the Price of Natural Gas, Athletic Business, March 2006.
- Meyer, M. 2007. Assessment of Parish's sagebrush regional distribution by local botanists. Personal communication from M. Meyer (CDFG), October 2007.
- Minnich, R.A., and R.J. Dezzani. 1998. "Historical Decline of Coastal Sage Scrub in the Riverside Perris Plain, California." Western Birds 29:366–391.
- Moore, D. et al., San Juan Creek Watershed Bacteriological Study, Final Report (2002).
- Moore, D., Bacteriological Survey of San Juan Creek Watershed Task 3: Report for the San Juan Creek Watershed Bacteriological Study (2002).
- Munger, K.R. ed., Munger Map Book, California and Alaska Oil and Gas Fields (37th ed. June 1993).
- Munger, K.R. ed., Munger Map Book, California and Alaska Oil and Gas Fields (42nd ed. August 2003).
- Munz, P.A., A Flora of Southern California (University of California Press, Berkeley, California, 1974).
- Murphy, D.D. 1990. A Report on the California Butterflies Listed as Candidates for Endangered Status by the U.S. Fish and Wildlife Service. Draft Report for California Department of Fish and Game Contract No. C-1755.
- NatureServe. 2007. NatureServe Explorer: An Online Encyclopedia of Life. Version 6.2. Arlington, Virginia: NatureServe. Accessed October 28, 2007. http://www.natureserve.org/explorer.
- NEA (Northwest Economic Associates). 2004. Draft Economic Analysis of Critical Habitat Designation for the Santa Ana Sucker. Prepared for the USFWS. September 23, 2004.
- NMFS (National Marine Fisheries Service). 2007. Federal Recovery Outline for the Distinct Population Segment of Southern California Coast Steelhead. NMFS, Southwest Regional Office.

- O'Leary, J.F. 1990. "Californian Coastal Sage Scrub: General Characteristics and Considerations for Biological Conservation." Endangered Plant Communities of Southern California: Proceedings of the 15th Annual Symposium, ed. A.A. Schoenherr, 24–41. Special Publication No. 3. Claremont, California:
- O'Leary, J.F. 1995. "Coastal Sage Scrub: Threats and Current Status." Fremontia 23(4):26–31.
- PACE (Pacific Advanced Civil Engineering, Inc). 2009. Newhall Ranch Resource Management Development Plan Floodplain Hydraulics Impacts Assessment Santa Clara River. Prepared for Newhall Land. Fountain Valley, California: PACE.
- Pacific Gas and Electric. Energy Efficient Commercial Pool Program, Preliminary Facility Report. 2006.
- Padley, W.D. Mountain Lion Ecology in the Southern Santa Ana Mountains, California. Prepared for the California Department of Fish and Game. Final Report Contract No. 87-M-6250. 1989.
- Padley, W.D. "Female Mountain Lion (*Felis concolor*) Home Ranges in the Southern Santa Ana Mountains, California." Abstract. In Fifth Mountain Lion Workshop. Organized by the California Department of Fish and Game and the Southern California Chapter of the Wildlife Society, San Diego, California, February 27–March 1, 1996. 1996.
- Paulsen, Susan and J. List, Environmental Defense Sciences, A Review of the Los Angeles Basin Plan Administrative Record (February 2003).
- PBS&J, Evaluation of Bacteriological Impacts to Runoff and Coastal Waters from the Crystal Cove Development (1999).
- PCR Services Corporation, Frank Hovore and Associates, FORMA Systems, *Biological Resources*Assessment of the Proposed Santa Clara River Significant Ecological Area (Prepared for Los Angeles
  County Department of Regional Planning) (November 2000).
- Peterson, M.D., et al., Probabilistic Seismic Hazard Assessment for the State of California in California Department of Conservation Division of Mines and Geology Open-File Report 96-08 (1996).
- Pitt, R., et al., The National Stormwater Quality Database, NSWQ, Version 1.0 (Prepared by University of Alabama and Center for Watershed Protection) (2003).
- Plant Species Occurring or Potentially Occurring on the Project Site.
- Psomas, Landmark Village Drainage Concept Report (September 15, 2004, Revised March 14, 2005).

- Psomas, Surveyed Topography Data for (Landmark Village) (1999).
- R.T. Frankian & Associates Report of Geotechnical Investigation Tentative Parcel Map 20838 Phase 2 Lot and P.D. No. 1522-2 Soledad Canyon Road Between Golden Oak Road and Squib Street (Santa Clarita, California, 2001).
- Real, C.R., Toppozada, T.R., and Parke, D.L., Earthquake Epicenter Map of California (showing events from 1900 through 1974 equal to or greater than magnitude 4.0 or intensity V) in California Division of Mines and Geology Map Sheet 39 (1978).
- RECON and Impact Sciences, Inc., Biota Report for the Newhall Ranch Specific Plan (1996).
- RECON, Draft River Management and Resource Conservation Plan for the Newhall Ranch Property (Los Angeles and Ventura County, California, December 1993).
- RECON, Survey for Arroyo Southwestern Toad.
- Reed, P.B., Jr., *National List of Plants that Occur in Wetlands: National Summary*, Biological Report 88 (24), 1988a (U.S. Fish and Wildlife Service, 1988).
- Report on Winter Special-Status Bird Species Survey. May 15, 2008.
- Results of Focused Surveys for Unarmored Threespine Stickleback and other Special-Status Fish Species.
- Results of NRMP Riparian Bird Survey on Santa Clara River Portion of Newhall Land and Farming Company Property. October 1, 2007.
- Ribes, Sandra, et al., Influence of Soot Carbonon the Soil-Air Partitioning of Polycyclic Aromatic Hydrocarbons, 37 Environmental Science & Technology 2675-2680 (2003).
- RMW Paleo, Newhall Ranch Paleontological Study (October 1994).
- Robson, Water-Resources Investigation Using Analog Model Techniques in the Saugus-Newhall Area, U.S. Geological Survey Open File Report (Los Angeles County, California, 1972).
- Royston, P., "Approximating the Shapiro-Wilk W test for Non-Normality" in *Statistics and Computing*, (1992).
- Rundel, P.W. "Sage scrub." In Terrestrial Vegetation of California, ed. M.G. Barbour, T. Keeler-Wolf, and A.A. Schoenherr, 208–228. 3rd ed. Berkeley, California: University of California Press. 2007.

- San Diego Regional Water Quality Control Board (SDRWQCB), Bacteria-Impaired Waters TMDL Project I for Beaches and Creeks in the San Diego Region, Technical Draft (2004).
- Sawyer, Clair, et al., Chemistry for Environmental Engineering (McGraw-Hill, Inc. 4th ed. 1994).
- Sawyer, J.O. and Todd Keeler-Wolf, *A Manual of California Vegetation*, California Native Plant Society, (Sacramento, California, 1995).
- SCCWRP, Effect of Increases in Peak Flows and Imperviousness on the Morphology of Southern California Streams, Technical Report 450 (2005).
- Schiff, K & P Tracking Sources of Bacteria Contamination in Stormwater Discharges from Mission Bay, California, 73 Water Environment Research 534-542 (2001).
- Schroeder, E.D., et al., Management of Pathogens Associated with Storm Drain Discharge, Center for Environmental and Water Resources Engineering, Department of Civil and Environmental Engineering, University of California, Davis (Prepared for Division of Environmental Analysis, California Department of Transportation) (May 2002).
- Schueler, T., "Nutrient Movement from the Lawn to the Stream," Article 4 in *The Practice of Watershed Protection* (2000).
- Schueler, T., Controlling Urban Runoff: A Practical Manual for Planning and Designing Urban BMPs, Publication No. 87703 (Metropolitan Washington Council of Governments, Washington, D.C., 1987).
- Schueler, T., Irreducible Pollutant Concentrations Discharged from Urban BMPs in Watershed Protection Techniques 1(3) and Watershed Protection Techniques 2(2) (1996).
- Sedgwick, J.A. "Willow Flycatcher (*Empidonax traillii*)" In The Birds of North America, ed. A. Poole and F. Gill. No. 533. Philadelphia, Pennsylvania: The Birds of North America, Inc. 2000.
- Shultz, L.M. 2006A. "Artemisia tridentata spp. parishii." Flora of North America North of Mexico 19:517. Ed. Flora of North America Editorial Committee. New York and Oxford. Accessed December 18, 2007. http://www.efloras.org/florataxon.aspx?flora\_id=1&taxon\_id=250068075
- Shultz, L.M. 2006B. "Artemisia tridentata spp. tridentata." Flora of North America North of Mexico 19:516. Ed. Flora of North America Editorial Committee. New York and Oxford. Accessed December 18, 2007. http://www.efloras.org/florataxon.aspx?flora\_id=1&taxon\_id=250068076.

- Shumway, R.H., et al., Statistical Approaches to Estimating Mean Water Quality Concentrations with Detection Limits, 36 Environmental Science & Technology 3345–3353 (2002).
- Sibley, David Allen, The Sibley Guide to Birds, National Audubon Society (Chanticleer Press, 2000).
- Sikand, Newhall Ranch Santa Clara River HEC-RAS Study (June 28, 2000).
- Sikand, Newhall Ranch Specific Master Drainage Concept, Santa Clara River (April 2001).
- Sikand, Supplemental Report for Newhall Ranch Santa Clara River HEC-RAS Study, (July 2000).
- Simons, Li & Associates, Summary Report, Fluvial Study of Santa Clara River and the Tributaries (November 1990).
- Singh, A.K., et al., "The Lognormal Distribution in Environmental Applications," *EPA Technology Support Center Issue*, *EPA 600-R-97-006* (1997).
- Snyder, S.A. "Falco peregrinus." Fire Effects Information System. U.S. Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory. Accessed November 4, 2007. http://www.fs.fed.us/database/feis. 1991.
- Sogge, M.K., R.M. Marshall, S.J. Sferra, and T.J. Tibbitts. A Southwestern Willow Flycatcher Natural History Summary and Survey Protocol. National Park Service, U.S. Department of the Interior. 1997.
- Soil Conservation Service, Soil Survey, Antelope Valley Area, California, (U.S. Department of Agriculture, Washington, D.C., 1970).
- South Coast Air Quality Management District, Air Quality Management Plan (2003).
- South Coast Air Quality Management District, CEQA Air Quality Handbook (Diamond Bar, California: South Coast Air Quality Management District, April 1993).
- Southern California Association of Government's (SCAG's) Regional Comprehensive Plan and Guide (2002).
- Southern California Earthquake Center (S.C.E.C.), available at <a href="http://www.data.scec.org/">http://www.data.scec.org/</a> (2000).
- Southern California Gas Company, 2002 California Gas Report (2002).
- State of California Executive Department. Executive Order W-59-93. Signed by Governor Pete Wilson. August 23, 1993.

- State of California, Fish and Game Code of California.
- Stebbins, R.C., A Field Guide to Western Reptiles and Amphibians, 3rd ed. Peterson Field Guide Series, (Houghton Mifflin Co., Boston, Massachusetts, 2003).
- Stephenson, J.R., and G.M. Calcarone. Southern California Mountains and Foothills Assessment: Habitat and Species Conservation Issues. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. General Technical Report GTR-PSW-172. 1999.
- Strecker, E. et al., "Determining Urban Stormwater BMP Effectiveness," Journal of Water Resources Planning and Management May/June 2001.
- Strecker, E. et al., Analyses of the Expanded EPA/ASCE International BMP Database and Potential Implications for BMP Design (Proceedings of the World Water and Environmental Resources Congress) (American Society of Civil Engineers, Salt Lake City, Utah, 2004).
- SunPower, "Sunpower Solar Calculator," http://www.sunpowercorp.com/For-Homes/How-To-Buy/Solar-Calculator.aspx, 2008.
- Suter, G.W. II and C.L. Tsao, Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota, 1996 Revision, Oak Ridge National Laboratory, ES/ER/TM-96/R2 (Oak Ridge, Tennessee 1996).
- Swift, Camm C. et al., The Status and Distribution of the Freshwater Fishes in Southern California in Bulletin of the Southern California Academy of Sciences 92(3) (1993).
- Tibor, David, *Inventory of Rare and Endangered Vascular Plants of California* (California Native Plant Society Special Publication No. 1, 6th ed., 2001).
- Titus, R.G., D.C. Erman, and W.M. Snider. *History and Status of Steelhead in California Coastal Drainages* south of San Francisco Bay. n.d.
- Transportation Research Board, National Resource Council, Highway Capacity Manual (2000).
- U.S. Army Corps of Engineers, Amended 404 Permit (No. 940050400-BAH) for Natural River Management Plan (June 2003).
- U.S. Army Corps of Engineers, Santa Clara River Adopted Discharge Frequency Values (adopted May 3, 1994).

- U.C. Berkeley (University of California, Berkeley). 2003. Online Data Access. Museum of Vertebrate Biology. http://mvz.berkeley.edu/.
- U.C. Davis (University of California, Davis). 2004. "General Plans." Statewide General Plan map for California. Distributed through the California Resources Agency. Accessed October 2008. http://casil.ucdavis.edu/frs/?group\_id=42&release\_id=225
- U.S. Census Bureau, "Annual Estimates of the Population for the United States and for Puerto Rico: April 1, 2000 to July 1, 2005," http://www.census.gov/popest/states/tables/NST-EST2005-01.xls. 2008.
- U.S. Department of Transportation, Federal Highway Administration, Fundamentals and Abatement of Highway Traffic Noises (September 1980).
- U.S. Environmental Protection Agency (EPA), Ambient Water Quality Criteria for Bacteria, USEPA 440/5-84-001 (1986).
- U.S. Environmental Protection Agency (EPA), California Toxics Rule (CTR) at 40 C.F.R. §131.38 (2000).
- U.S. Environmental Protection Agency (EPA), Comment of Water Quality Criteria, National Academy of Science to National Academy of Engineering, USEPA R3-73-033 (1972).
- U.S. Environmental Protection Agency (EPA) "Counties Designated Nonattainment for PM-2.5." http://www.epa.gov/air/oaqps/greenbk/mappm25.html. 2007.
- U.S. Environmental Protection Agency (EPA), EPA Map of Radon Zones (1993).
- U.S. Environmental Protection Agency (EPA), Inventory of US Greenhouse Gas Emissions and Sinks: 1990–2005. 2007.
- U.S. Environmental Protection Agency (EPA), *Total Maximum Daily Loads for Toxic Pollutants San Diego Creek and Newport Bay, California* (June 14, 2002).
- U.S. Environmental Protection Agency (EPA), Water Quality Standards for Coastal and Great Lakes Recreational Waters at 69 Fed.Reg. 67218 (2004).
- U.S. Fish and Wildlife Service, Biological Opinion for the Natural River Management Plan, Santa Clarita, Los Angeles County, California (1998).
- U.S. Fish and Wildlife Service, *Biological Opinion for the Natural River Management Plan, Santa Clarita, Los Angeles County, California* (1-8-02-F-4R) (File No. 940050400-BAH) (November 2002).

- USFWS (U.S. Fish and Wildlife Service). California Condor Recovery Plan. Prepared by the USFWS in cooperation with the Recovery Team (S.R. Wilbur, D. Esplin, R.D. Mallette, J.C. Borneman, and W.H. Radtkey). 1980.
- U.S. Fish and Wildlife Service, Endangered and Threatened Wildlife and Plants; Final Designation of Critical Habitat for the Arroyo Toad (Bufo californicus); Final Rule, 70 Fed.Reg. 19561–19633 (2005).
- U.S. Fish and Wildlife Service, Endangered and Threatened Wildlife and Plants; Review of Native Species that Are Candidates or Proposed for Listing as Endangered or Threatened; Annual Notice of Findings on Resubmitted Petitions; Annual Description of Progress on Listing Actions; Proposed Rule (San Fernando Valley spineflower), 70 Fed.Reg. 4869–24934 (2005).
- U.S. Fish and Wildlife Service, *Final Designation of Critical Habitat for the Arroyo Toad*, Final Rule, 50 CFR Part 17 (RIN 1018-AT42) (April 13, 2005).
- USFWS. Draft Recovery Plan for the Least Bell's Vireo (Vireo bellii pusillus). Portland, Oregon: USFWS, Region 1. 1998.
- USFWS, Gnatcatcher Letter, July 9, 2007.
- USFWS. Arroyo Southwestern Toad (*Bufo microscaphus californicus*) Recovery Plan. Portland, Oregon: USFWS. 1999.
- U.S. Fish and Wildlife Service, Least Bell's Vireo Survey Guidelines (2001).
- U.S. Fish and Wildlife Service, *Proposed Designation of Critical Habitat for the California Red-Legged Frog* (Rana aurora draytonii), 69 Fed.Reg. 19620–19642 (April 13, 2004).
- U.S. Fish and Wildlife Service, *Proposed Designation of Critical Habitat for the Arroyo Toad*, 69 Fed.Reg. 23254–23328 (April 28, 2004).
- U.S. Fish and Wildlife Service, *Proposed Designation of Critical Habitat for the Endangered Unarmored Threespine Stickleback*, 45 Fed.Reg. 76012–76015 (1980).
- USFWS. 2002B. Recovery Plan for the California Red-Legged Frog (Rana aurora draytonii). Portland, Oregon: USFWS, Region 1.
- U.S. Fish and Wildlife Service, *Revised Unarmored Threespine Stickleback Recovery Pla*n (Portland, Oregon, December 26, 1985).
- U.S. Fish and Wildlife Service, Southwestern Flycatcher Survey Protocol (2000).

- U.S. Fish and Wildlife Service, Species Account, Unarmored Threespine Stickleback, Ventura Field Office, available at http://ventura.fws.gov/SpeciesAccounty/fish/UTS.htm.
- Urbonas, B., "Optimization of Stormwater Quality Capture Volume" in ASCE Urban Stormwater Quality Enhancement Source Control, Retrofitting and Combined Sewer Technology (New York, New York, 1990).
- Valencia Company, Natural River Management Plan: Permitted Projects and Activities Under the United States

  Corps of Engineers 404 Permit, California Department Fish and Game 1603 Agreement and 2081 Permit

  (approved November 30, 1998).
- Valencia Company, Santa Clara River and its Tributaries, Los Angeles County (August 1998).
- Valencia Water Company, SB610 Water Supplement Assessment for the Landmark Village Project (August 2005).
- Ventura County Flood Control Department (VCFCD), Ventura Countywide Stormwater Monitoring Program: Annual Report for Permit Year 3, (November 1, 1997).
- Ventura County Flood Control Department (VCFCD), Ventura Countywide Stormwater Monitoring Program:

  Annual Report for Permit Year 4, (November 1998).
- Ventura County Flood Control Department (VCFCD), Ventura Countywide Stormwater Monitoring Program:

  Annual Report for Permit Year 5, (November 1999).
- Ventura County Flood Control Department (VCFCD), Ventura Countywide Stormwater Monitoring Program: 2000/2001 Monitoring Status Report, (July 2001).
- Ventura County Flood Control Department (VCFCD), Ventura Countywide Stormwater Monitoring Program:

  Annual Report for Permit Year 2, Reporting Year 8, (October 2002).
- Ventura County Flood Control Department (VCFCD), Ventura Countywide Stormwater Monitoring Program:

  Annual Report for Permit Year 3, Reporting Year 9 (October 2003).
- Ventura County Solid Waste Management Department, Guidelines for the Preparation of Environmental Assessments for Solid Waste Impacts, Estimated Solid Waste Generation Rates available at <a href="http://www.ciwmb.ca.gov/">http://www.ciwmb.ca.gov/</a>.
- W & S Consultants, Addendum to Intensive Phase I Archaeological Survey of the West Ranch Project Area, Los Angeles County, California: Archaeological Survey of the Valencia Boulevard Extension Study Area (Los Angeles, California, December 1995).

- W & S Consultants, *Phase II Test Excavations and Determinations of Significance at CA-LAN-2133*, -2233, -2234, -2235, -2236, -2240, -2241, *Los Angeles County, California* (Los Angeles, California, October 14, 1994).
- Wade, T.J., et al., Do U.S. Environmental Protection Agency Water Quality Guidelines for Recreational Waters

  Prevent Gastrointestinal Illness? A Systematic Review and Meta-Analysis, 111 Environmental Health

  Perspectives 1102–1109 (2003).
- Water Environment Federation (WEF), WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, Urban Runoff Quality Management (1998).
- Westman, W.E. "Diversity Relations and Succession in Californian Coastal Sage Scrub." Ecology 62:439-455. 1981.
- Wildlife Habitat Buffers and Connectivity White Paper. November 2008.
- William S. Hart Union High School District, Correspondence from Larna Baril to Impact Sciences, Inc. July 9, 2004).
- William S. Hart Union High School District, *Enrollment and Design Capacity* (Provided by Lorna Baril, William S. Hart Union High School District in correspondence to Impact Sciences, Inc.) (July 9, 2004).
- Woodward Clyde Consultants, Driscoll, E.D., et al., Analysis of Storm Even Characteristics for Selected Rainfall Gages Throughout the United States, (U.S. Environmental Protection Agency (EPA), 1989).
- Woodward Clyde Consultants, Driscoll, E.D., et al., Pollutant Loadings and Impacts from Stormwater Runoff,

  Volume III: Analytical Investigations and Research Report, Federal Highway Administration,

  FHWA-RD-88-008, 1990.
- World Heath Organization (WHO). Guidelines for Safe Recreational Water Environments, Vol. 1, Ch. 4 (World Health Organization, Geneva, 2003).
- Zeiner, D.C., W.F. Laudenslayer Jr., and K.E. Mayer. 1988. California's Wildlife: Volume I. Amphibians and Reptiles. Sacramento, California: California Statewide Wildlife Habitat Relationships System, California Department of Fish and Game.
- Zeiner, D.C., W.F. Laudenslayer Jr., K.E. Mayer, and M. White, eds. 1990A. California's Wildlife: Volume II. Birds. Sacramento, California: California Department of Fish and Game.

- Zeiner, D.C., W.F. Laudenslayer Jr., K.E. Mayer, and M. White, eds. 1990B. California's Wildlife: Volume III. Mammals. Sacramento, California: California Department of Fish and Game.
- Ziony, J.I. and Yerkes, R.F., Evaluating Earthquake and Surface-Faulting Potential, U.S. Geological Survey Professional Paper 1360 (1985).